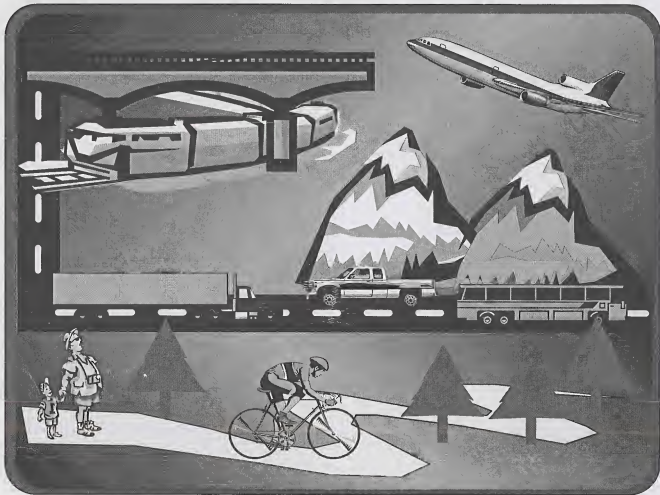


S  
388.097  
T6sco  
1997

# Annual Report



## System Characteristics Overview Policy Goals and Actions Status



STATE DOCUMENTS COLLECTION

DTG C7 1999

MONTANA STATE LIBRARY  
1515 E. 6th AVE.  
HELENA, MONTANA 59620

Montana Department of Transportation  
July, 1997



PLEASE RETURN

MONTANA STATE LIBRARY



3 0864 0014 6098 2

# Annual Report

## Table of Contents

---



- **Introduction** .....Pages 1-3
- **System Characteristics Overview**
  - ▶ Economic Development.....Pages SC 1-12
  - ▶ Freight Mobility.....Pages SC 13-22
  - ▶ Roadway System Performance.....Pages SC 23-40
  - ▶ Passenger Transportation.....Pages SC 41-53
  - ▶ Bike and Pedestrian Transportation.....Pages SC 54-55
  - ▶ Fiscal Year 1996 Funding.....Pages SC 56-60
- **Policy Goals and Actions Status**
  - ▶ Economic Development.....Pages GA 2-5
  - ▶ Freight Mobility.....Pages GA 6-8
  - ▶ Roadway System Performance.....Pages GA 9-15
  - ▶ Access Management.....Page GA 16
  - ▶ Land Use Planning and Transportation.....Page GA 17-18
  - ▶ Public Transportation.....Pages GA 19-21
  - ▶ Bike and Pedestrian Transportation.....Pages GA 22-25





## Introduction

---

TranPlan 21 was Montana's first statewide multimodal transportation plan. The plan, published in February of 1995, identified the most pressing transportation issues facing Montana, evaluated future transportation concerns, and established the policy goals and actions that will guide the state's transportation system into the 21st Century.

The intent of TranPlan 21 was to avoid "wish list" planning by establishing a clear set of policy goals and priorities for addressing statewide transportation needs, based upon the funding levels that Montana can afford. The process of identifying needs, establishing goals, and setting priorities involved careful technical analysis, policy deliberation, and the active involvement of transportation providers and users throughout Montana.

TranPlan 21 covered a twenty-year planning period. Although it may take many years to implement all of the policy actions identified in the plan, a good portion of the actions have already been implemented and a majority of are being work on.

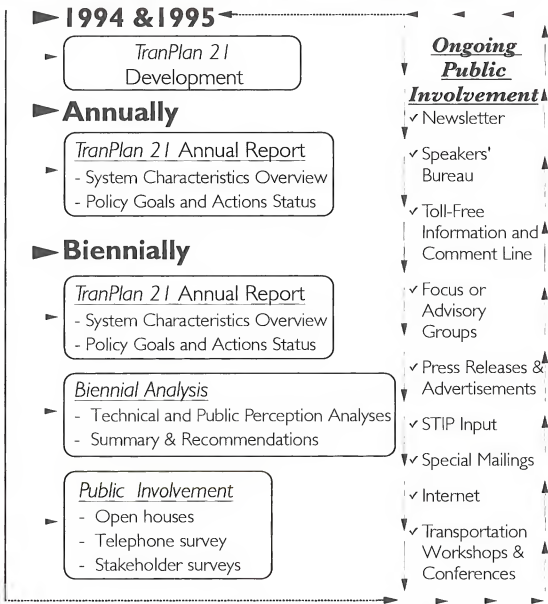
The flow chart on the adjacent page shows the process MDT is following to implement and continually evaluate the status of TranPlan 21 and Montana's transportation system.

The goal of the TranPlan 21 Annual Report is to monitor system characteristics, and report on the status of TranPlan 21 actions as well as the MDT offices responsible for implementing each action.

Note: The Annual Report will be supplemented with the first Biennial Analysis later in 1997.



# TranPlan 21 Implementation and Evaluation Process





*Annual Report*

---

---

**SYSTEM  
CHARACTERISTICS  
OVERVIEW**

---

---





# ***Annual Report***

System Characteristics Overview

## ***Economic Development***





# Economic Development

## Exhibit 1 - Multimodalism in Montana

### Use of Different Transportation Modes

Modal Element	Use in 1993	Use in 1994	Use in 1995	Use in 1996	1993 - 1996 Percent Change
Motor Vehicles (Total Daily VMT on all Roads)	23,900,000	25,000,000	25,750,000	25,807,000	8.0%
Air Travel (Enplanements)	968,000	987,800	1,057,188	1,073,980	10.9%
Passenger Rail (Amtrak Ridership)	139,500	139,800	117,600	97,900	-29.8%
Urban Transit (Annual Ridership, All Systems)	1,511,000	1,592,000	1,626,000	1,659,900	9.9%
Rural Transit * (Annual Ridership)	326,000	280,000	261,000	280,600	-13.9%
Intercity Bus (Approximate Ridership)	99,800	136,300	177,700	161,200	61.5%
Bicycle (Trips)	Not Available				N/A
Pedestrian Facilities	Almost Everyone				N/A

\* Rural General Public Transportation Ridership only.



Refer to Exhibit 6 in Original TranPlan 21

# Economic Development

## Discussion - Multimodalism in Montana

### Use of Different Transportation Modes

---



TranPlan 21 has initiated an approach to planning and managing Montana's transportation system that includes all modes and considers how we can use the existing transportation system more effectively.

The goal...a statewide multimodal transportation system that includes facilities and services that are operated by many different units of government and the private sector. When considering the geographical scale and low population of Montana, citizens, businesses, and visitors alike have a high level of mobility.

The availability of more than one mode ensures that users have a choice of mode. Competition between modes is a distinguishing characteristic of multimodalism. This occurs where the markets, or demand for modes overlap and it is possible to make choices or trade-offs between modes. Today, while there is some level of public transportation available to most Montanans, there is little competition between modes.

Exhibit 1 illustrates how the use of modes has changed since TranPlan 21 was published. Intercity Bus shows the highest increase, with Air Travel and Motor Vehicle use also experiencing healthy increases. Rural Transit and Passenger Rail ridership have decreased since 1993. The decrease in the growth rate of VMT is consistent with national trends.

(MDT is in the process of conducting a Personal Transportation Survey that will provide additional information on Bicycle and Pedestrian Modes.)





# Economic Development

## Exhibit 2 / Discussion

### Journey to Work by Mode - 1990

---

Transportation Mode	Total	Percent
Drove Alone	249,820	71.8%
Car Pool	41,171	11.8%
Walked	26,780	7.7%
Worked at Home	21,876	6.3%
Other Means	3,320	1.0%
Bicycle	3,203	0.9%
Bus	1,762	0.5%
<b>TOTAL</b>	<b>347,932</b>	<b>100.0%</b>

Measuring trips by mode provides a more detailed comparison. Based on the 1990 Census, 72% of our trips to work were made driving alone. Statewide, another 12% of work trips were made in car pools of at least two, while only one half of one percent occurred on public transportation. In the state's larger urban areas where alternative modes of travel are generally most accessible, there was an even greater tendency to drive alone. Walking accounted for a significant portion of journey to work travel at just under eight percent. This is twice the national average and is probably due to the compact older character of Montana's urban areas.



---

Source: 1990 Census, US Bureau of the Census, Census & Economic Information Center, Montana  
Refer to Exhibit 7 in Original TranPlan 21

# Economic Development

## Exhibit 3 / Discussion -

### Population in Montana's Largest Counties



	Population			Percent Change	Percent Change
	1980	1990	1996 est.	1980-90	1990-96
Cascade County	80,696	77,691	81,087	-3.7%	4.4%
Flathead County	51,966	59,218	71,253	14.0%	20.3%
Gallatin County	42,865	50,463	60,565	17.7%	20.0%
Lake	19,056	21,041	24,921	10.4%	18.4%
Lewis & Clark	43,039	47,495	53,345	10.4%	12.3%
Missoula County	76,016	78,687	88,523	3.5%	12.5%
Park	12,869	14,484	16,143	12.5%	11.5%
Ravalli	22,493	25,010	33,586	11.2%	34.3%
Silver Bow County	38,092	33,941	34,634	-10.9%	2.0%
Yellowstone County	108,035	113,419	125,966	5.0%	11.1%
State Wide Population	789,065	799,065	879,372	1.3%	10.1%

Population growth is one of the key factors affecting the future demand for and supply of transportation in Montana. Between 1980 and 1990, population in the state grew by only 10,000. However, in the short period between 1990 and 1993 it grew by nearly 42,000 and in the past six years Montana increased its population by more than 80,000 to 879,372. This is an increase of over 10% since 1990.

These recent population increases are consistent with TranPlan 21's forecast of a 16% overall population growth by the year 2010. The rural areas of Ravalli, Flathead, Gallatin, and Lake counties are among the top areas experiencing rapid population growth although the rate of growth is decreasing.





# Economic Development

## Exhibit 4

### Manufacturing Sector Labor Earnings

Manufacturing Industry	Labor Earnings (000'S)	Labor Earnings (000'S)	Percent of Total Manufacturing Earnings 1992	Percent of Total Manufacturing Earnings 1995	Percent Earnings Growth 1992-1995
	1992	1995			
<i>Total Manufacturing</i>	729,079	807,780	100.0%	100.0%	10.8%
Manufactured Food Products	64,066	71,202	8.8%	8.8%	11.1%
Paper Products	39,362	42,556	5.4%	5.3%	8.1%
Printing & Publishing	62,588	71,712	8.6%	8.9%	14.6%
Chemical Products	23,689	27,488	3.2%	3.4%	16.0%
Petroleum and Coal Products	48,827	56,740	6.7%	7.0%	16.2%
Rubber and Miscellaneous Plastic Products	4,888	7,780	0.7%	1.0%	59.2%
Lumber and Wood Products	298,628	301,264	41.0%	37.3%	0.9%
Furniture and Fixtures	9,332	11,752	1.3%	1.5%	25.9%
Primary Metals	49,698	37,795	6.8%	4.7%	-24.0%
Fabricated Metal Products	17,015	21,576	2.3%	2.7%	26.8%
Machinery and Computer Equipment	17,469	39,675	2.4%	4.9%	127.1%
Electrical Equipment	6,171	5,972	0.8%	0.7%	-3.2%
Other Transportation Equipment	3,267	10,588	0.4%	1.3%	224.1%
Motor Vehicles and Equipment	4,584	6,658	0.6%	0.8%	45.2%
Stone, Clay and Glass	28,695	35,095	3.9%	4.3%	22.3%
Instrument Products	8,290	11,051	1.1%	1.4%	33.3%
Miscellaneous Manufacturing	30,866	36,159	4.2%	4.5%	17.1%

Source: University of Montana, U.S. Bureau of Economic Analysis  
Refer to Exhibit II-13 in Original TranPlan 21



# Economic Development Discussion

## Montana's Traditional Economic Base

---



Montana's economy was built on a foundation of agriculture, mining, forest products, and manufacturing. These "basic" industries are heavily dependent upon the statewide network of highways, railroads, and intermodal transfer facilities for exporting their products. These industries will continue to generate transportation demands for the shipment of bulk commodities from throughout Montana to national and international markets.

Agriculture generates about \$2 billion in annual cash receipts in Montana. U.S. Department of Agriculture statistics document that agriculture is and will continue to be an important component of the economy in nearly all Montana counties. Due to the bulky nature of agriculture commodities, efficient and affordable rail transportation continues to be particularly important.

Mining is another traditional mainstay of Montana economy. In 1995 Montana mining generated over \$279 million in wages, salaries and business profits. The potential for expanded mining activity in Montana is significant. Historic trends suggest the rate of mining extraction will likely go through significant swings over the next twenty years, resulting in a special challenge for transportation planners.

In 1995 the Manufacturing Industry generated over \$805 million in wages, salaries and business profits. As shown in Exhibit 4, Lumber and Wood Products continue to dominate this industry making up just over 37% of the industry, but a trend in increased diversification continues.





# Economic Development

## Exhibit 5

### Montana's Most Rapidly Growing Service Industries

Service Sector	Labor Earnings (000's) 1992	Labor Earnings (000's) 1995	Earnings Growth 1992-1995	Percent Earnings Growth 1992-1995
<b>Retail Trade</b>	<b>\$1,095,634</b>	<b>\$1,312,709</b>	<b>\$217,075</b>	<b>19.8%</b>
Building Materials	\$83,637	\$106,965	\$23,328	27.9%
General Merchandise	\$100,402	\$127,367	\$26,965	26.9%
Food Stores	\$182,274	\$195,004	\$12,730	7.0%
Automotive Dealers	\$210,649	\$252,522	\$41,873	19.9%
Apparel and Accessory Stores	\$31,588	\$34,245	\$2,657	8.4%
Furniture and Home Furnishings Stores	\$54,576	\$71,019	\$16,443	30.1%
Eating & Drinking Places	\$278,297	\$333,469	\$55,172	19.8%
Miscellaneous Retail	\$154,211	\$192,118	\$37,907	24.6%
<b>Personal &amp; Business Services</b>	<b>\$2,178,902</b>	<b>\$2,763,176</b>	<b>\$584,274</b>	<b>26.8%</b>
Hotels and other Lodging	\$98,543	\$124,681	\$26,138	26.5%
Personal Service	\$83,929	\$99,184	\$15,255	18.2%
Private Household	\$20,462	\$23,999	\$3,537	17.3%
Business Service	\$212,768	\$296,098	\$83,330	39.2%
Auto Repair, Services, and Parking	\$88,511	\$121,079	\$32,568	36.8%
Miscellaneous Repair Services	\$42,398	\$51,018	\$8,620	20.3%
Amusement and Recreation Services	\$89,882	\$108,612	\$18,730	20.8%
Motion Pictures	\$18,922	\$25,942	\$7,020	37.1%
Health Services	\$909,828	\$1,111,033	\$201,205	22.1%
Legal Services	\$126,827	\$140,156	\$13,329	10.5%
Educational Services	\$47,499	\$65,956	\$18,457	38.9%
Social Services	\$103,058	\$135,834	\$32,776	31.8%
Museums and Gardens	\$1,844	\$2,423	\$579	31.4%
Membership Organizations	\$118,168	\$153,843	\$35,675	30.2%
Acct, Engineering and Management Services	\$180,006	\$245,796	\$65,790	36.5%
Miscellaneous Services	\$36,257	\$57,522	\$21,265	58.7%

Source: University of Montana,  
U.S. Bureau Of Economic Analysis  
Refer to Exhibit II-23 in Original TranPlan 21





# Economic Development Discussion

## Montana's Most Rapidly Growing Service Industries



The major economic change creating new and different demands on the transportation system is the growth of the service sector. Private service industries such as health care, recreational activities, legal services, and management consulting are projected to be among the fastest growing in Montana and throughout the entire nation. In Montana, much of the growth is due to an aging and more affluent population, growth in health-related services, a growing demand for business support services, and most importantly, growth in tourism and recreation. Earnings in these industries are projected to double over the next 20 years.

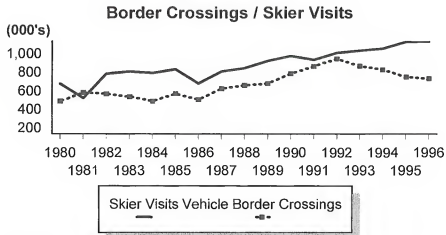
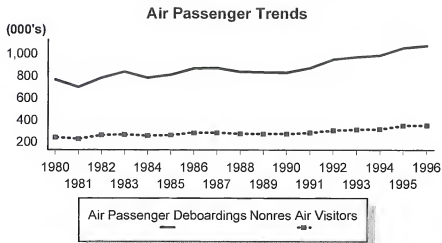
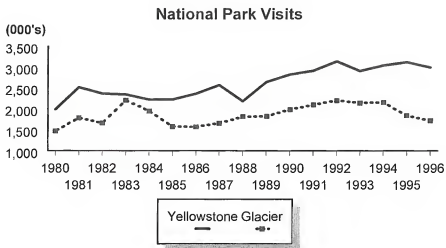
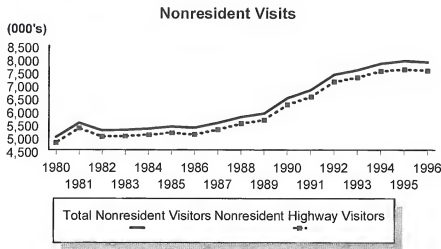
Exhibit 5 shows the rapid growth of both Personal & Business Services and Retail Trade. Building Materials and Furniture and Home Furnishings both have had earning growths of over 26% for the past three years. Half of the listed Personal and Business Services had growth of more than 30% in the past three years.

As service-related businesses continue to become a more important component of Montana's economy, transportation needs within the state will expand. Emerging new service businesses are more likely to utilize package delivery services, air transportation and electronic media to support their day-to-day business activities.





# Economic Development Exhibit 6 Montana Tourism Trends



Skier Visits = Residents + Nonresidents  
Border Crossing = Canada to U.S.

Source: University of Montana, Institute for Tourism and Recreation Research  
Refer to Exhibit II-19 in Original TranPlan 21

# Economic Development Discussion

## Montana Tourism Trends

---



While Montana's service sector is still benefiting from significant growth in tourism and recreational travel, 1996 was unusual for the Montana tourism and recreation industry. The University of Montana's Institute for Tourism and Recreation Research estimates that more than 7 1/2 million non-residents entered Montana by car in 1996. This is a decrease of .6% over 1995, and the first decrease in 10 years. Montana airport deboardings continued with the sixth consecutive year of growth.

While overall nonresident visitation has nearly doubled in the past 10 years, there is great disparity in the visitation numbers at Montana's attractions and businesses. Montana's National Parks and ski resorts are among the most popular travel and tourism destinations, however visitor counts at both Yellowstone National Park and Glacier National Park experienced slight decreases in 1996. Ski area visits have increased steadily during the 1990s.

Nonresident travel and tourism is expected to continue to grow over the long term. Several trends including a growing population in the United States and Canada with increased leisure time will contribute to this continued growth.

The continued growth of Montana tourism and recreation raises new issues for statewide and regional transportation planning. In particular, as visitor numbers increase, traffic volumes on key routes utilized by tourists also increase. Issues of congestion and potential safety problems may become more prevalent particularly for destination areas served by highways such as US 93.





# Economic Development

## Exhibit 7 - Average Daily Traffic at Montana-Canada Ports of Entry

Port of Entry Location	1983 Traffic		1993 Traffic		1996 Traffic		1983-1993 Percent Change in All Traffic	1993-1996 Percent Change in All Traffic
	Commercial	All	Commercial	All	Commercial	All		
Del Bonita	N/A	130	N/A	195	N/A	160	50.0%	-17.9%
Morgan	14	88	19	103	27	122	17.0%	18.4%
Opheim	7	62	16	85	11	75	37.1%	-11.8%
Piegan	15	645	63	725	27	715	12.4%	-1.4%
Raymond	27	394	70	415	93	440	5.3%	6.0%
Roosville	102	570	120	850	167	1,225	49.1%	44.1%
Scobey	23	127	10	181	38	171	42.5%	-5.5%
Sweetgrass	167	800	400	2,340	519	1,850	192.5%	-20.9%
Turner	18	88	N/A	175	N/A	148	98.9%	-15.4%
Whitetail	N/A	45	N/A	40	N/A	60	-11.1%	50.0%
Whitlash	N/A	25	N/A	45	N/A	45	80.0%	0.0%
Wild Horse	21	90	N/A	281	N/A	216	212.2%	-23.1%
Willow Creek	N/A	100	N/A	172	N/A	144	72.0%	-16.3%
<b>TOTAL</b>	N/A	3,164	N/A	5,607	N/A	5,371	77.2%	-4.2%

### Daily Counts

Source: Montana Department of Transportation, Traffic Data Collection Section  
Refer to Exhibit IV-3 in Original TranPlan 21

# Economic Development Discussion

## Vehicular Traffic at Montana-Canada Ports of Entry



One of the long term issues that MDT monitors is the effect NAFTA has on traffic passing through Montana. As shown in Exhibit 7, traffic at Montana-Canada Ports of Entry increased 77% between 1983 and 1993, but showed a 14% decrease in 1994 although between 1994 and 1996 it regained 12% of the loss. Because of numerous variables, the impact of NAFTA should be long term, rather than short term. The overall effects of NAFTA can be grouped into three classes: (1) those that result from changes in the rules and regulations applying to trade; (2) those that are a result of changes in access to the territory of other countries; and (3) those that result from changes in rules and regulations applied to vehicles and operators when transporting within one of the countries.

With the passage of the NHS Act, two high priority corridors were defined by Congress: CANAMEX on I-15, and the CAMINO REAL which connects I-90 in Billings to I-15 in Great Falls via Lavina and Harlowton. This action may allow Montana to access additional funds if Congress provides special earmarked funds for these corridors.

Border crossings between Canada and Montana are critical elements of Montana's transportation system. As mentioned above, traffic at individual border-crossing facilities varies significantly because of several factors. Montana's only 24-hour ports of entry are located at Roosville, Sweetgrass-Coutts, and Raymond. Other ports of entry operate during locally determined hours or during summer months only. The port of entry at Sweetgrass is by far the busiest facility because it is located along Interstate 15, connecting the western United States to Calgary, Edmonton, and other major population centers in Canada.

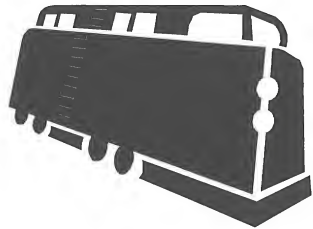
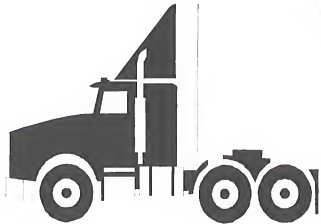




# *Annual Report*

System Characteristics Overview

## *Freight Mobility*

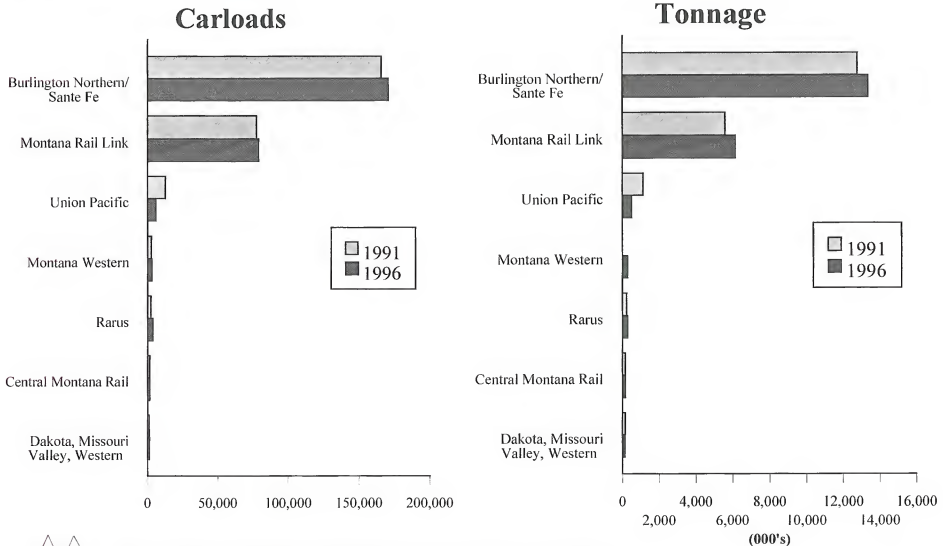




# Freight Mobility - Rail System

## Exhibit 8

### Total Originating and Terminating Non-Coal Freight



Source: Montana Department of Transportation & Rail Operators, Annual Reports  
Refer to Exhibit IV-33 in Original TranPlan 21





# Freight Mobility - Rail System

## Discussion

### Total Originating and Terminating Non-Coal Freight



Montana's freight rail system is a key element of Montana's overall transportation system. The system includes just under 3,500 miles of track and although track mileage has declined over the past decade, the volume of freight shipped by rail has remained steady. Freight rail moves more than 250,000 carloads to and from Montana shipping points annually. Approximately 78% of this freight is export Montana products. Grain, lumber, and coal are the primary goods shipped by rail. Montana's rail system is also used by "bridge" traffic passing through the state.

As Exhibit 8 shows, Burlington Northern/Santa Fe remains the leader in Montana's freight rail market. In 1996 Burlington Northern/Santa Fe moved more than 170,000 originating and terminating non-coal carloads in the state, accounting for almost 65% of total Montana traffic. This is an increase of 2.9% since 1991. Union Pacific is the only other operator that has shown an increase in market share since 1991. BNSF's dominance is even more dramatic when coal shipments are taken into account.

During the 1980s, almost 1,400 miles of track were abandoned in Montana. In other cases, branchlines that were formerly operated by the major railroads now operate as independent short lines. Communities no longer directly served by rail must now haul their commodities to the nearest transfer facility by truck. Although short line operators do not move a large amount of Montana's commodities, they do play an important role in that they move commodities from many rural areas to the mainline operators.



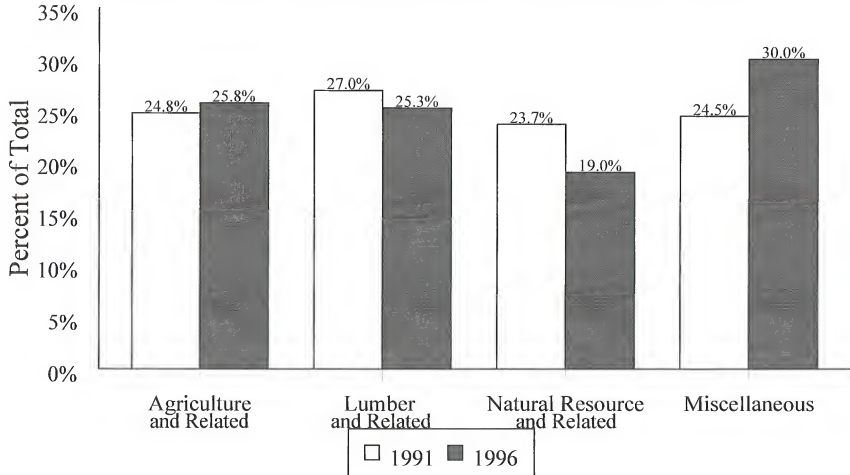


# Freight Mobility

## Exhibit 9

### Non-Coal Rail Freight Shipments by Commodity

#### Non-Coal, Originating and Terminating Carloads



Source: Montana Department of Transportation & Rail Operators, Annual Reports  
Refer to Exhibit IV-34 in Original TranPlan 21

# Freight Mobility Discussion

## Rail Freight Shipments by Commodity

---



Railroad operators in Montana meet the demands for the shipment of large volumes of coal and a variety of other bulk commodities. Montana's freight rail industry meet demands of the state's basic economic sectors. The freight rail market for bulk commodities in Montana has the following segments:

- **\*Agriculture and Related Commodities.** This includes Farm Products, Fresh Fish as well as Other Marine Products, and Food and Kindred Products. This accounted for 25.8% of all shipments in 1996, a decrease of 3.5% from 1994, but an overall increase of 1% since 1991.
- **\*Lumber and Related Commodities.** This includes: Lumber and Wood Products (except furniture), Pulp, Paper and Allied Products and Printed Matter. This accounted for 25.3% of all shipments in 1996, down 1.7% from 1991.
- **\*Natural Resource and Related Commodities.** This includes: Forest Products, Metallic Ores, Crude PETRO NAT Gas and NAT GSLN, Nonmetallic Minerals (except fuels), Chemicals and Allied Products, and Petroleum and Coal Products. This accounted for 19.0% of all shipments in 1996, an increase of 1.2% since 1994, but a dramatic decrease of 4.7% since 1991.
- **\*Miscellaneous Goods.** This includes: All other commodities, some of which are Glass Mince, Construction Products, Primary Metal Products, Gypsum and Other Materials. This accounted for 30% of all shipments in 1996, up 5.5% from 1991.

In a special category because of sheer scale of production and transportation is the shipment of coal which represents 51.1% of total commodity carloads in Montana. Burlington Northern/Santa Fe is responsible for 99% of the coal transfers in the state. This represents 62% of Burlington Northern/Santa Fe's total commodity shipments.

\* Categories based on Railroad Companies Annual Commodity Reports

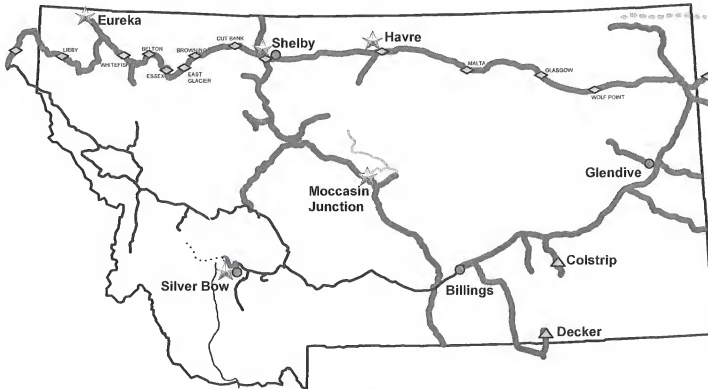




# Freight Mobility

## Exhibit 10

### Montana's Rail System & Freight Transfer Facilities



#### Montana's Rail Lines

- BURLINGTON NORTHERN / SANTA FE
- MONTANA RAIL LINK
- RARUS RAILWAY
- MONTANA WESTERN RAILWAY
- UP / SP
- DAKOTA, MISSOURI VALLEY AND WESTERN RAILROAD
- CENTRAL MONTANA RAIL
- AMTRAK ROUTE/STATIONS

#### Montana's Rail Freight Facilities

- Trailer on flat car/container on flat car (TOFC/COFC).
- Coal transfer facility.
- Lumber reload.

Source: Montana Rail Operators  
Refer to Exhibit IV-36 in Original TranPlan 21



# Freight Mobility Discussion Montana's Rail Freight Transfer Facilities

---



Intermodal freight rail in Montana involves the transfer of trailers on flat cars(TOFC), containers on flat cars(COFC), the reload of lumber and other goods from trucks to rail cars, and the transfer of grain from trucks to hopper cars. The vast majority of trailer on flat car and container on flat car intermodal transfers take place at the Port of Montana in Silver Bow, the Northern Express Transportation Authority in Shelby, and at the Burlington Northern/Santa Fe intermodal terminal in Billings. Grain transfer takes place at hundreds of terminals. All three of the intermodal facilities have experienced increases in intermodal traffic during the past three years.





# Freight Mobility

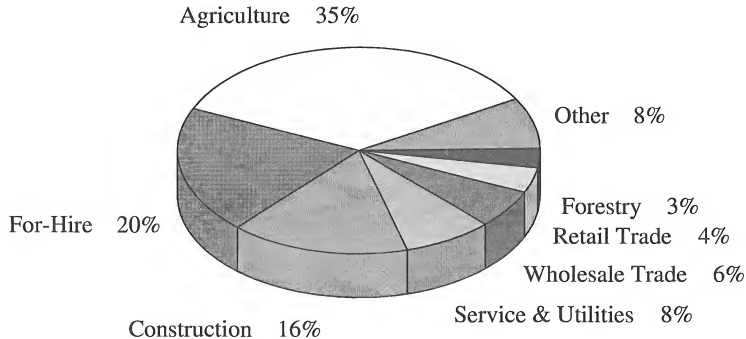
## Exhibit 11

### Highway Freight in Montana

---

1994

Montana Trucks by Major Use  
(Excludes Pick-ups, Minivans, Panels and Utilities)



Source: FHWA - Truck Industry and Use Survey

---

# Freight Mobility Discussion Highway Freight In Montana

---



Montana's trucking industry is another key element of Montana's overall transportation system as well as an important part of Montana's economy. In 1995 trucking employed 26,308 Montana residents, one out of every 11 individuals, and generated a payroll in excess of \$650 million dollars. The trucking industry created 3,798 new jobs (a 17% increase) between 1989 and 1995.

Trucks were less than 5.0% of all vehicles registered in 1992, but accounted for 34% of total state and federal highway user taxes. Montana's highways are constructed and maintained with state and federal funds collected from all highway users in the form of fuel taxes, registration fees, carrier fees and excise taxes.

As the largest user of trucks in Montana, agriculture relies on trucks for the continuing health of the industry. Trucks move nearly 100% of both livestock and grain at some point during production. Trucks, for instance, carry wheat to grain elevators for later shipment. Trucks also carry cattle to stock yards and markets across the state, and trucks carry most finished products such as cereals, bread, leather, meat and wool to final retail destinations across Montana and the United States.

For-hire trucking firms, which are second to agriculture in the use of trucks, serve all industries in the state. They carry the products of agriculture, mining, manufacturing and other production industries, and goods and supplies bought, sold or used by industries in Montana and throughout the region.





# Freight Mobility

## Exhibit 12

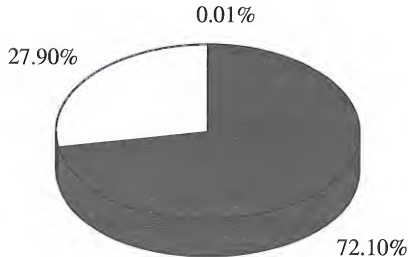
### Highway Freight in Montana

---

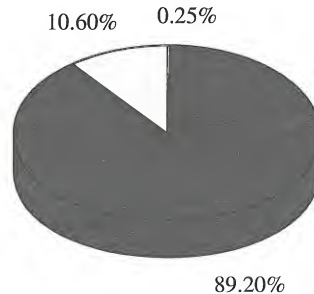
1994 Annual Tons

Montana Manufacturing Commodities

**Outbound**



**Inbound**



Source: ATA Foundation, Inc. - Transearch Data

---



# Freight Mobility Discussion Highway Freight In Montana

---



The 71,218 tons of freight moved each business day to and from Montana by truck in 1994 represents 75% of the total manufactured freight moved by all modes of transportation. Manufactured freight moved by trucks in 1994 increased significantly over the 63,500 tons moved in 1982.

Trucks move over 75% of Montana commodities - nearly 20 million tons annually. As Exhibit 23 displays, trucks are responsible for movement of a majority of outbound as well as inbound manufacturing commodities. Most inbound freight is destined for either Montana's wholesale distribution centers or retail outlets. Other inbound freight is made up of materials and parts used by Montana manufacturers. Trucks complement all modes of transportation and move the products of Montana's manufacturers and regional distribution centers





# ***Annual Report***

System Characteristics Overview

## *Roadway System Performance*





# Roadway System Performance

## Exhibit 13

### Montana's Highway System by Functional Classification

Functional Classification	Total Center Line Miles	Total Lane Miles	Center Line Miles						
			National Highway System	* Primary	Secondary	Urban	State Highways	Local Rural	Local Municipal
Interstate	1,191	4,764	1,191	N/A	N/A	N/A	N/A	N/A	N/A
Rural Principal Arterial	2,622	5,443	2,604	17	N/A	N/A	N/A	N/A	N/A
Rural Minor Arterial	2,991	6,050	N/A	2,764	174	N/A	N/A	51	2
Rural Major Collector	7,077	14,073	N/A	N/A	4,489	N/A	346	2,231	11
Rural Minor Collector	9,044	17,856	N/A	N/A	N/A	N/A	118	8,904	23
Rural Local Road	44,529	69,244	N/A	N/A	N/A	N/A	658	42,731	1,140
Urban Principal Arterial	173	539	63	48	N/A	62	N/A	N/A	1
Urban Minor Arterial	220	462	N/A	6	2	189	2	0	22
Urban Collector	304	611	1	N/A	0	76	11	0	197
Urban Local Street	1,695	3,416	N/A	N/A	N/A	N/A	13	0	1,683
<b>TOTAL</b>	<b>69,846</b>	<b>122,458</b>	<b>3,858</b>	<b>2,835</b>	<b>4,665</b>	<b>326</b>	<b>1,147</b>	<b>53,917</b>	<b>3,079</b>

As of April, 1997

\*Roads Under 16ft Wide are Considered One Lane

Source: Montana Department of Transportation, Planning Division, Road Inventory and Mapping Section.

Refer to Exhibit IV-1 in Original TranPlan 21

# Roadway System Performance Discussion Montana's Highway System

---



Montana is one of the most rural states in the nation in both population and transportation characteristics. This means the highway system fulfills a central role in allowing the state to function politically, economically, and socially. Three-quarters of all miles traveled in Montana are driven outside the state's 14 urban areas.

Roadways connect Montana's communities and the state to the national and international transportation system. The highway system is also the largest single capital investment in the state. Proper maintenance and upkeep is critical to preserving this system. The cost of maintaining the system is borne by the users of the system mainly through motor vehicle fuel taxes. Because Montana has so many miles of highway compared to population, funding for maintaining our highways will probably always be limited. Therefore, using existing resources most cost effectively is a key goal for the MDT.

The extent of the roadway system is shown in Exhibit 13. Center line miles are a measure of roadway length, and lane miles are a measure of roadway length multiplied by the number of lanes along each roadway segment. Montana's public roads and highways include nearly 70,000 center line miles and 122,458 lane miles.





# Roadway System Performance

## Exhibit 14

### Number and Condition of Montana's Bridges - 1996

Highway System	Number of Bridges	Structurally Deficient Bridges		Functionally Obsolete Bridges	
		Number	Percent	Number	Percent
Interstate	805	0	0.0%	88	10.9%
Non-Interstate, National Highway System	464	20	4.3%	31	6.7%
Primary	503	16	3.2%	41	8.2%
Secondary	473	32	6.8%	35	7.4%
Urban	57	6	10.5%	17	29.8%
Local State Maintained	245	18	7.3%	0	0.0%
Local Other	1,847	468	25.3%	165	8.9%
<b>Total</b>	<b>4,394</b>	<b>560</b>	<b>12.7%</b>	<b>377</b>	<b>8.6%</b>



Source: National Bridge Inspection Program, MDT Bridge Bureau  
Refer to Exhibit IV-2 in Original TranPlan 21

# Roadway System Performance Discussion

## Number and Condition of Montana's Bridges - 1996



There are over 4,394 bridges in Montana that are inspected by MDT under National Bridge Inspection Standard guidelines. In general, 21% of Montana's bridges are rated substandard compared to a national average of 30%. Exhibit 14 shows the number and condition of Montana's bridges. Structurally deficient bridges represent 12.7% of the bridges, and 8.6% of the state's bridges are functionally obsolete. The determination of functional obsolescence is based upon federal standards, which might be considered excessive for some of the state's low volume roads. Most bridges in the western part of the state are in need of retrofitting to bring them into compliance with code provisions for earthquake loading resistance. MDT's Bridge Bureau has been developing methods for retrofitting and is programming retrofits based upon a prioritized list of bridges. MDT is also developing a Bridge Management System that will provide more complete data from which to identify more accurately the functional needs of bridges.



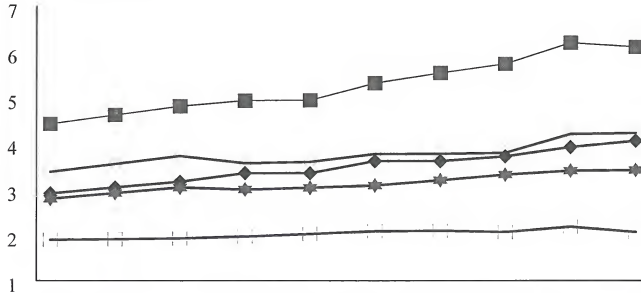


# Roadway System Performance

## Exhibit 15

### Daily Vehicle Miles Traveled By District

Millions of Miles Traveled Per Day



	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Compound Annual Growth Rate
District 1 (Missoula Kalispell)	4.437	4.629	4.822	4.945	4.951	5.326	5.545	5.741	6.208	6.113	3.6%
District 2 (Bozeman Butte)	2.917	3.042	3.168	3.358	3.355	3.619	3.618	3.722	3.924	4.062	3.7%
District 3 (Great Falls Havre)	2.802	2.922	3.043	3.001	3.035	3.087	3.202	3.322	3.411	3.422	2.2%
District 4 (Glendive Glasgow)	1.900	1.915	1.930	1.974	2.032	2.089	2.101	2.071	2.190	2.070	1.0%
District 5 (Billings)	3.387	3.558	3.730	3.575	3.602	3.772	3.781	3.799	4.214	4.234	2.5%
<b>Total</b>	<b>15.443</b>	<b>16.067</b>	<b>16.691</b>	<b>16.853</b>	<b>16.975</b>	<b>17.893</b>	<b>18.247</b>	<b>18.656</b>	<b>19.947</b>	<b>19.902</b>	<b>2.9%</b>



Source: Montana Department of Transportation, Planning Division, Traffic Data Collection Section.  
Refer to Exhibit 6 in Original TranPlan 21



# Roadway System Performance

## Discussion

### Vehicle Miles Traveled by District

---



For the past twenty years Montanans have been driving more each year. Consequently, as Montana's population has grown and tourism and "bridge" traffic has increased, there has been an increase in Vehicle Miles Traveled (VMT). Exhibit 15 shows recent growth in VMT for each of MDT's districts as well as the compound annual growth rate. For the most part the districts have shown a continuing pattern of growth, however in the past year there was a slight decrease due to a decrease in traffic through both National Parks and national trends.

Statewide commercial vehicle VMT is expected to grow at a slower rate than passenger vehicle VMT. It is hoped that increased use of other modes such as walking, bicycling, and public transportation will slow the rate of VMT growth. However, experience from demand management programs in large metropolitan areas suggests that successful demand management programs have, at best, modest impacts on the rate of VMT growth.

Employment and population growth, increased tourist visitors and "bridge traffic", and the increase in the amount Montanans drive each year are the main factors driving VMT growth.





# Roadway System Performance

## Exhibit 16

### Daily Vehicle Miles Traveled

	1993 Daily Vehicle Miles Traveled	1995 Daily Vehicle Miles Traveled	1996 Daily Vehicle Miles Traveled	Percent Change 1995-1996	Percent Change 1993-1996
Rural Interstate	5,230,184	5,648,007	5,728,950	1.43%	9.54%
Urban Interstate	564,651	601,957	591,874	-1.68%	4.82%
<b>TOTAL INTERSTATE</b>	<b>5,794,835</b>	<b>6,249,964</b>	<b>6,320,824</b>	<b>1.13%</b>	<b>9.08%</b>
Rural Non-Interstate NHS	4,963,613	5,670,957	5,541,068	-2.29%	11.63%
Urban Non-Interstate NHS	953,034	928,767	926,130	-0.28%	-2.82%
<b>TOTAL NON-INTERSTATE NHS</b>	<b>5,916,647</b>	<b>6,599,724</b>	<b>6,467,198</b>	<b>-2.01%</b>	<b>9.31%</b>
<b>TOTAL NHS</b>	<b>11,711,482</b>	<b>12,849,688</b>	<b>12,788,022</b>	<b>-0.48%</b>	<b>9.19%</b>
Rural Primary	2,468,878	2,685,159	2,666,587	-0.69%	8.01%
Urban Primary	549,511	556,174	536,989	-3.45%	-2.28%
<b>TOTAL PRIMARY</b>	<b>3,018,389</b>	<b>3,241,333</b>	<b>3,203,576</b>	<b>-1.16%</b>	<b>6.14%</b>
<b>TOTAL SECONDARY</b>	<b>1,585,363</b>	<b>1,731,648</b>	<b>1,749,838</b>	<b>1.05%</b>	<b>10.37%</b>
<b>TOTAL URBAN</b>	<b>1,936,253</b>	<b>2,123,023</b>	<b>2,148,542</b>	<b>1.20%</b>	<b>10.96%</b>
<b>TOTAL LOCAL</b>	<b>5,610,959</b>	<b>5,805,479</b>	<b>5,917,022</b>	<b>1.92%</b>	<b>5.45%</b>
<b>STATEWIDE GRAND TOTAL</b>	<b>23,862,446</b>	<b>25,751,171</b>	<b>25,807,000</b>	<b>0.22%</b>	<b>8.15%</b>



Source: Montana Department of Transportation, Planning Division, Road Inventory and Mapping Section.  
Refer to Exhibit IV-7 in Original TranPlan 21

# Roadway System Performance

## Discussion

### Daily Vehicle Miles Traveled

---



Use of Montana's highway system is increasing. The most common measure of roadway use is the vehicle miles traveled indicator. A vehicle mile traveled is the equivalent of one vehicle traveling one mile. In 1996 there were just under 26 million daily vehicle miles of travel. This is an increase of .2% from the previous year. This traffic volume has been increasing steadily over the past several years, but the increase is still less than the national average.

Exhibit 16 lists the daily vehicle miles traveled on each element of the highway system for 1993 through 1996 as well as the percent change.

In general terms, Montana highways provide free-flowing mobility for motorized vehicles. There are few segments of the highway system that operate under congested traffic conditions. Those areas that are congested are primarily in the state's urbanized areas and selected corridors in western Montana.





# Roadway System Performance

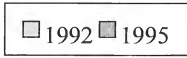
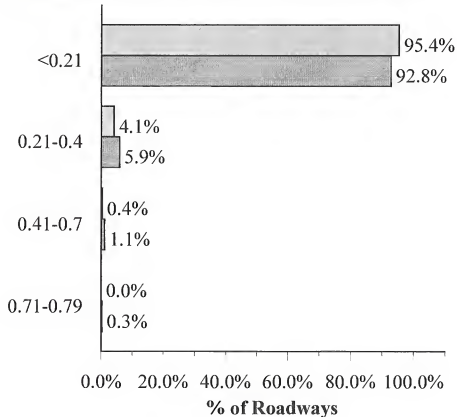
## Exhibit 17

### Volume-Service Flow Ratios

---

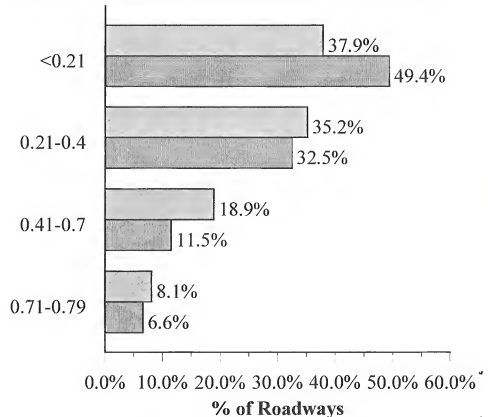
#### Rural

Highway Mileage by Volume - Service Flow Ratio



#### Urban

Highway Mileage by Volume - Service Flow Ratio



Source: U.S. Department of Transportation, Federal Highway Administration, 1995, FHWA-PL-96-017  
Refer to Exhibit IV-8 in Original TranPlan 21



# Roadway System Performance

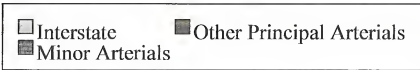
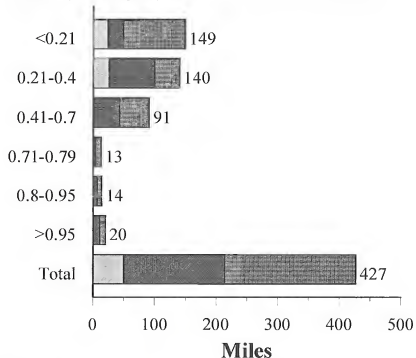
## Exhibit 18

### Urban Volume-Service Flow Ratios



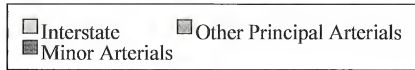
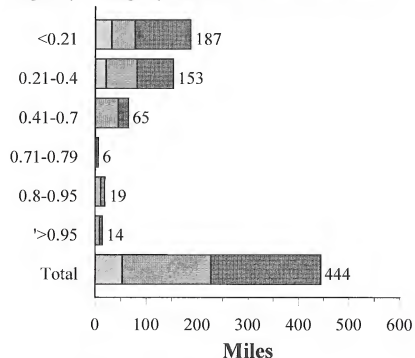
#### Urban - 1992

Highway Mileage by Volume - Service Flow Ratio



#### Urban - 1995

Highway Mileage by Volume - Service Flow Ratio



Source: U.S. Department of Transportation, Federal Highway Administration, 1995, FHWA-PL-96-017  
 Refer to Exhibit 7 in Original TranPlan 21





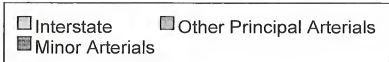
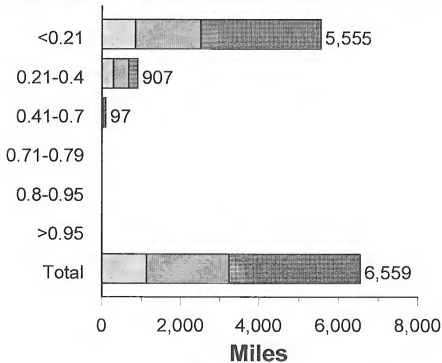
# Roadway System Performance

## Exhibit 19

### Rural Volume-Service Flow Ratios

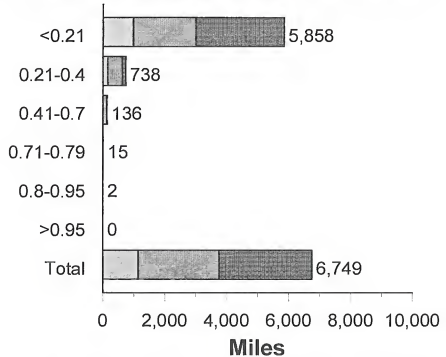
#### Rural - 1992

Highway Mileage by Volume - Service Flow Ratio



#### Rural - 1995

Highway Mileage by Volume - Service Flow Ratio



Source: U.S. Department of Transportation, Federal Highway Administration, 1995, FHWA-PL-96-017  
 Refer to Exhibit 7 in Original TranPlan 21

# Roadway System Performance Discussion

## Volume-Service Flow Ratios



The volume-service flow ratio compares the volume of vehicles traveling a roadway with the roadway's capacity. For example, a score of .95 indicates the road is operating at 95% capacity. In Montana, only 1.4% of rural roadways operate at 41% or more of their capacity and less than 7% of urban roadways operate at 71% or more of their capacity.

Exhibits 17, 18, and 19 compare various forms of volume-service flow and the table below shows how Montana compares to surrounding states.

	1995 Rural Roadways operating at >41% capacity	1995 Urban Roadways operating at >71% capacity
Montana	1.4%	0.7%
Colorado	10.1%	14.0%
North Dakota	0.0%	5.1%
South Dakota	0.9%	6.6%
Wyoming	1.4%	2.3%
National Avg.	6.9%	17.1%

### Introducing the Congestion Management System -

The Department is working on implementing its Congestion Management System (CMS). First output is available and the data is being closely reviewed. This data will replace the volume-service flow ratio and level of service as a way for the Department to gauge congestion throughout Montana.

The new CMS produces output in terms of Congestion Indices (CI). A CI is a numerical measure of the level of service of a roadway segment. The CI scale ranges from 0-100, (100 represents the best LOS). Grades are then assigned based on CI numerical value (ex.  $85 - 100 = A$ ).

At this point, CI's have been developed only for the rural non-Interstate NH and Primary Systems. This data indicates that while there is localized congestion on both systems, overall 1997 CI's are 74 and 80 (LOS B) respectively. For comparison, TranPlan 21 defined the lowest acceptable rural LOS as C, or a CI of 55.





# Roadway System Performance

## Exhibit 20 - Present Serviceability

### Primary and Interstate Roadways

Average Serviceability of Statewide System (Present Serviceability Index)							
Roadway Classification	1983-1984	1985-1986	1987-1988	1989-1990	1991-1992	1993-1994	1995-1996
Primary System	2.6	2.8	3	3.4	3.3	3.4	3.3
Interstate System	3.6	3.8	3.7	3.7	3.6	3.5	3.4
Secondary System	Information Not Available						

Scale: 0 =Poor 2-3=Fair 3-4=Good 5 =Excellent

The Present Serviceability Index provides a subjective (i.e. user) rating of pavement ride quality. Based on this measure, the serviceability rating of the Primary and Interstate Systems in Montana is good.

The data presented in Exhibit 20 indicates that the average Present Serviceability Index for the Primary System pavements increased from the mid "fair" range in 1983 to the mid "good" range in 1990 and has remained roughly the same since then. During the same period, the average serviceability of Interstate pavements remained in the middle of the "good" range. This partly reflects the level of investment the state made between 1983 and 1992, and the fact that federal funding for the Interstate System remained approximately constant throughout the period.



Source: MDT Pavement Management System  
\*\*\*Interstate Rated on Odd Years - Primary Rated on Even Years  
Refer to Exhibit IV-9 in Original TranPlan 21



# Roadway System Performance Discussion - Overall Pavement Index Primary and Interstate Roadways

---



## Introducing The Overall Pavement Index

In 1996 the Department developed the Pavement Management System, which in turn produced the Overall Pavement Index (OPI). The OPI will replace the Present Serviceability Index. The main difference in the two is that PSI was primarily based on pavement ride quality while OPI is a pavement performance index made up of a combination of all the individual distress indexes such as surface cracking, raveling, patching, rutting, and ride. This information is surveyed annually by the Pavement Management Section and is an indicator of the overall condition of the roadway.

1996 OPI Data for the Primary and Interstate Systems were both 70 (Fair)

### OPI Scale

96 - 100 = Excellent

80 - 95 = Good

60 - 79 = Fair

40 - 59 = Poor

0 - 39 = Very Poor





# Roadway System Performance

## Exhibit 21

### Accidents, Injuries, and Fatalities in Montana

**1993**

	All Accidents*	1993 Injury Accidents		1993 Injuries All Persons		1993 Pedestrian Injuries	
		Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal
<b>Rural</b>	8,427	146	3,466	171	5,524	8	34
<b>Urban</b>	10,412	20	2,678	23	3,764	5	126
<b>Total</b>	18,839	166	6,144	194	9,288	13	160

**1996**

	All Accidents*	1996 Injury Accidents		1996 Injuries All Persons		1996 Pedestrian Injuries	
		Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal
<b>Rural</b>	11,577	161	4,097	182	6,446	8	43
<b>Urban</b>	12,624	18	2,882	18	4,110	5	115
<b>Total</b>	24,201	179	6,979	200	10,556	13	158

### Percent Change 1993 - 1996

	All Accidents*	Injury Accidents		Injuries All Persons		Pedestrian Injuries	
		Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal
<b>Rural</b>	37.4%	10.3%	18.2%	6.4%	16.7%	0.0%	26.5%
<b>Urban</b>	21.2%	-10.0%	7.6%	-21.7%	9.2%	0.0%	-8.7%
<b>Total</b>	28.5%	7.8%	13.6%	3.1%	13.7%	0.0%	-1.3%

\* Injury, Property & Fatals

Source: Transportation HIS System, Montana Department of Transportation, Planning Division, Traffic Safety Section.  
Refer to Exhibit IV-10 in Original TranPlan 21



# Roadway System Performance Discussion

## Accidents, Injuries, and Fatalities in Montana

---



The number of fatalities and injuries per vehicle mile traveled provide measures of highway safety. Exhibit 21 lists the total number of accidents as well as people injured.

In 1996, 7,158 injury accidents occurred on the state's roadways, resulting in 10,556 people injured and 200 fatalities. When measured in terms of the distances traveled per incident, there were 2.12 fatalities and 114.1 injuries per 100 million annual VMT. Montana's fatality rates were worse than the 1.7 fatalities per 100 million annual VMT nationally. However, Montana's injury rate of 114.1 was less than the national injury rate of 137. The injury rate has been increasing slightly over the last five years and the fatality rate has been decreasing since 1969.





# Roadway System Performance

## Exhibit 22

### Montana's Public Road Miles

---

System Classification	Center Line Miles	Lane Miles
National Highway System	3,859	10,382
Primary Highway System	2,836	5,790
Secondary Highway System	4,665	9,308
Urban Highway System	346	775
<b>Total Designated Systems</b>	<b>11,706</b>	<b>26,255</b>
State Highways	1,147	2,293
OffSystem City	3,076	N/A
OffSystem County	53,917	N/A
<b>Total</b>	<b>69,846</b>	<b>N/A</b>

As of April, 1997



Source: Montana Department of Transportation, Planning Division, Road Inventory and Mapping Section.  
Refer to Exhibit 1 in Original TranPlan 21

---

# Roadway System Performance

## Exhibit 23 - Montana's Highway System

### Maintenance Responsibility



System Classification	Maintenance Responsibility (Center Line Miles)		
	State	Local / Other	Total
National Highway System	3,803	56	3,859
Primary Highway System	2,827	9	2,836
Secondary Highway System	248	4,417	4,665
Urban Highway System	78	268	346
State Highways	1,147	0	1,147
OffSystem City/County	0	56,993	56,993
<b>TOTAL</b>	<b>8,103</b>	<b>61,743</b>	<b>69,846</b>

As of April, 1997

Source: Montana Department of Transportation, Planning Division, Road Inventory and Mapping Section.  
Refer to Exhibit IV-6 in Original TranPlan 21

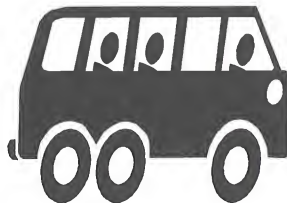




# ***Annual Report***

System Characteristics Overview

## *Passenger Transportation*







# Passenger Transportation

## Exhibit 24

### Montana's Estimated Intercity Bus Ridership



Organization	1993 Approximate Ridership	1994 Approximate Ridership	1995 Approximate Ridership	1996 Approximate Ridership	1993-1996 Percent Change	Home Office Base
Greyhound Lines	50,810	54,930	76,531	53,082	4.5%	Dallas, TX
Rimrock Trailways *	29,000	60,771	78,892	85,015	193.2%	Billings, MT
Powder River Transportation and Tours	20,000	20,600	22,248	23,138	15.7%	Gillette, WY

\* 1994 Reflects Buy-Out of Intermountain Lines

In addition to intercity bus service, passenger transportation in Montana includes urban and rural transit, transit for the elderly and disabled, intercity bus, and vanpooling. These services are provided by different public agencies, not-for profit organizations, and the private sector. Passenger transportation is provided at the local, intrastate, intercity, and interstate levels.

To a large degree, Federal funding defines the organization of bus transportation in Montana. Federal assistance is distributed to providers by categorical allocation that distinguishes between urban transit, rural transit, and transportation for the elderly and persons with disabilities.

As illustrated in Exhibit 24, Intercity Bus Ridership has increased quite dramatically for Rimrock Trailways. This is mainly due to the industry realignment when Rimrock acquired Intermountain Lines in August of 1994. Greyhound experienced a 39% increase in 1995 due to an increase in scheduled service.

Source: Intercity Bus Operators, January 1996.  
Refer to Exhibit IV-21 in Original TranPlan 21





# Passenger Transportation Exhibit 25 Transit System Ridership

## Urban Transit System Ridership

System	Annual Ridership				Percent Change 1990 to 1996	Percent Change 1995 to 1996
	1990	1994	1995	1996		
Great Falls Transit District	467,926	446,595	407,956	435,472	-6.9%	6.7%
Metropolitan Transit (Billings)	859,760	645,664	668,975	666,238	-22.5%	-0.4%
Mountain Line Transit (Missoula)	512,448	499,317	549,297	558,161	8.9%	1.6%
Section 5307 Total	1,840,134	1,591,576	1,626,228	1,659,871	-9.8%	2.1%

Source: Section 5307 Operators, Montana Department of Transportation, January 1997.  
Refer to Exhibit IV-18 in Original Tranplan

## Rural General Public Transit System Ridership

System	Annual Ridership				Percent Change 1990 to 1996	Percent Change 1995 to 1996
	1990	1994	1995	1996		
Area IX Agency on Aging (Eagle Transit)	37,400	34,430	26,696	34,022	-9.0%	27.4%
Blackfeet Transit	8,334	7,278	6,438	8,031	-3.6%	24.7%
Butte-Silver Bow (The Bus)	166,616	125,118	114,112	107,845	-35.3%	-5.5%
City of Helena (Dial-A-Ride)	38,964	32,420	36,178	39,266	0.8%	8.5%
Fergus County Council on Aging (Central Montana Shuttle)	16,761	28,649	24,436	22,465	34.0%	-8.1%
Fort Peck Transportation System	17,130	17,312	26,858	30,677	79.1%	14.2%
Garfield County Council on Aging (Big Dry Transit)	3,397	2,086	2,029	2,066	-39.2%	1.8%
Powder River County Transportation System	1,447	3,209	3,802	3,019	108.6%	-20.6%
Valley County Council on Aging (Valley Co. Transit)	22,735	21,296	20,847	31,259	37.5%	49.9%
Section 5311 Total	312,784	271,798	261,396	280,646	-10.3%	7.4%

Source: Section 5311 History Records, Montana Department of Transportation, January 1997.  
Refer to Exhibit IV-19 in Original TranPlan 21



# Passenger Transportation Discussion Transit System Ridership

---



Transit in Montana is most important to that segment of the population without access to a car. Currently, it performs a social role providing the lowest cost basic mobility for many Montanans. For the future, particularly in the urban areas, there are opportunities for using existing and developing new public transportation services which can provide an alternative to the single occupancy vehicle and support demand management strategies.

Ridership provides one measure of the demand for public transportation services as currently provided in Montana. Between 1990 and 1996 ridership on Montana's urban transit systems declined by 9.8% to a statewide total of 1,659,871. In this past year ridership increased 2.1%. Ridership on the rural transit systems decreased 10.3% between 1990 and 1996 to an annual total of 280,646. In 1996 rural transit ridership increased 7.4% bringing annual ridership to 280,646. This is due to the restructuring of rural routes, clarification of ridership reporting procedures, an increase in agencies such as nursing homes with their own "in-house" transportation, and weather conditions. Welfare reform and the transportation demands of welfare to work are expected to increase public transportation use.





# Passenger Transportation Exhibit 26 Selected Transit System Performance Measures

	\$ Operating Costs Per Passenger				\$ Operating Costs Per Mile				Riders Per Mile			
	1990	1994	1995	1996	1990	1994	1995	1996	1990	1994	1995	1996
<b>Urban Transit Systems</b>												
Great Falls Transit District	\$2.26	\$3.06	\$3.04	\$3.11	\$2.55	\$2.87	\$2.99	\$2.10	1.10	1.00	1.06	1.00
Metropolitan Transit (Billings)	\$1.71	\$2.67	\$2.67	\$2.79	\$2.30	\$2.62	\$2.76	\$2.88	1.30	1.00	1.04	1.03
Mountain Line Transit (Missoula)	\$3.02	\$2.97	\$2.87	\$2.59	\$2.49	\$2.86	\$3.03	\$2.66	0.80	0.90	0.93	1.03
<b>Urban Transit - Average</b>	<b>\$2.33</b>	<b>\$2.90</b>	<b>\$2.86</b>	<b>\$2.83</b>	<b>\$2.45</b>	<b>\$2.78</b>	<b>\$2.92</b>	<b>\$2.55</b>	<b>1.10</b>	<b>1.00</b>	<b>1.01</b>	<b>1.02</b>
<b>Rural General Public Systems Transit</b>												
Area IX Agency on Aging (Eagle Transit)	\$3.44	\$4.28	\$5.89	\$5.29	\$1.46	\$2.53	\$3.04	\$2.37	0.40	0.60	0.52	0.46
Garfield County Council on Aging (Big Dry Transit)	\$3.58	\$6.51	\$8.02	\$8.03	\$1.38	\$1.86	\$1.49	\$1.22	0.40	0.30	0.19	0.16
Blackfeet Transit	\$4.80	\$8.69	\$12.85	\$12.15	\$1.27	\$2.55	\$3.05	\$2.76	0.30	0.29	0.23	0.23
Butte-Silver Bow (The Bus)	\$1.75	\$2.97	\$3.59	\$4.03	\$2.14	\$2.45	\$2.52	\$2.77	1.20	0.80	0.71	0.69
City of Helena (Dial-A-Ride)	\$4.08	\$5.75	\$5.84	\$5.81	\$2.64	\$2.85	\$2.94	\$2.96	0.60	0.50	0.50	0.51
Fergus County Council on Aging (Central Montana Shuttle)	Not Funded	\$2.58	\$3.16	\$3.32	Not Funded	\$2.21	\$2.18	\$2.12	0.70	0.90	1.00	0.74
Fort Peck Transportation System	\$9.33	\$9.17	\$6.31	\$6.47	\$2.13	\$2.05	\$1.88	\$1.93	0.20	0.20	0.32	0.31
Powder River County Transportation System	\$6.26	\$3.16	\$4.38	\$5.09	\$1.52	\$1.44	\$1.49	\$1.90	0.20	0.50	0.32	0.36
Valley County Council on Aging (Valley Co. Transit)	\$2.57	\$3.33	\$3.48	\$3.23	\$1.21	\$1.59	\$1.59	\$1.75	0.50	0.50	0.47	0.56
<b>(Rural Transit) Average</b>	<b>\$4.48</b>	<b>\$5.16</b>	<b>\$5.95</b>	<b>\$5.94</b>	<b>\$1.72</b>	<b>\$2.17</b>	<b>\$2.24</b>	<b>\$2.20</b>	<b>0.50</b>	<b>0.51</b>	<b>0.47</b>	<b>0.45</b>

Source: Section 18 History Records, Section 9 Operators, Montana Department of Transportation, Planning Division, Transit Section.  
Refer to Exhibit IV-22 in Original TranPlan 21



# Passenger Transportation Discussion

## Selected Transit System Performance Measures

---



Ridership per mile, cost per passenger, and cost per mile provide information about the performance and current operating environment of transit systems in Montana. This information is displayed in Exhibit 26.

Urban transit providers tended to have the lowest operating cost per passenger and highest numbers of riders per service mile. In recent years the number of riders per service mile on urban transit systems has fallen from 1.1 in 1990 to 1.02 in 1996. At the same time cost per passenger and operating cost per mile has increased, although 1995 showed a decrease of \$.04 in cost per passenger.

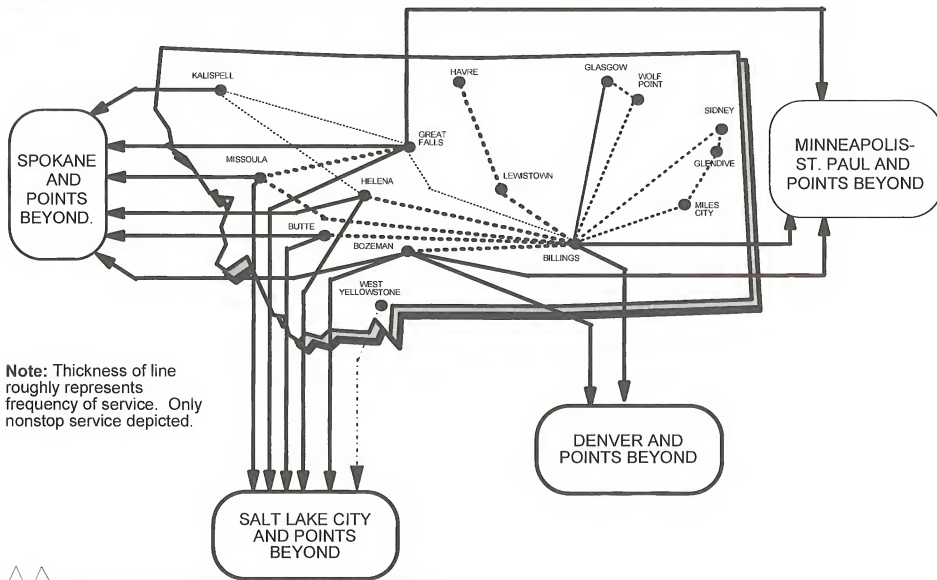
Rural transit systems have widely differing riders per service mile. In general, rural transit has lower ridership and consequently higher cost per passenger than the urban transit systems. Riders Per Mile ranges from 1.20 to as low as .16 passengers per service mile. Rural transit systems have experienced cost increases that have grown faster than the increase in passengers. The average cost per rural transit system passenger was \$4.48 in 1990 and \$5.94 in 1996 which represents an increase of 32%.





# Passenger Transportation

## Exhibit 27 - Montana's Scheduled Commercial Air Transportation System



**Note:** Thickness of line roughly represents frequency of service. Only nonstop service depicted.

Source: Aeronautic Division and Selected Airline Schedules.  
Refer to Exhibit IV-28 in Original TranPlan 21



# Passenger Transportation Discussion

## Air Transportation in Montana

---



Air transportation plays an important role in Montana because of the state's geography and distance from the nation's economic and population centers. The ability to connect Montana's rural areas to emergency medical facilities and urban centers, and to domestic and international destinations through air transportation is vital for Montana's citizens and businesses.

Air transportation services are provided by the private sector. The services provided are constrained by the need to cover costs to stay in business and meet safety-related regulatory requirements. The public sector is involved through the ownership and operation of airports. Planning the airport system and public funding of capital projects takes place at the local, state, and federal levels. At a national level, the Federal Aviation Authority has designated a system of airports of national significance, the National Plan of Integrated Airport Systems, which is eligible for federal funds

At the state level, MDT's Aeronautics Division designates a system of airports that are included in the Montana State Aviation System Plan. This includes general aviation airports that perform an essential role in ensuring emergency medical service access, natural resource management, economic and social development and are eligible for state aviation funding.

Air service in Montana comprises three main components: commercial air service, essential air service and general aviation. Commercial scheduled services and essential air service provides regularly scheduled passenger air service. Essential Air Service is a federally subsidized service, provided by Big Sky Airlines, that ensures air access to rural communities that would not otherwise be served by commercial airlines. General aviation facilities do not have scheduled flights, rather they are used for recreational, agricultural, or other services.





# Passenger Transportation Exhibit 28 Enplanements and Air Freight Trends

## Primary Commercial Service Airports

Airport	Enplanements				Percent Change	Percent Change	Air Freight (tons)				Percent Change	Percent Change
	1986	1993	1995	1996	1986-1996	1995-1996	1986	1993	1995	1996	1986-1996	1995-1996
Billings	332,575	303,855	331,146	322,023	-3.2%	-2.8%	6,211	12,304	10,249	10,979	76.8%	7.1%
Bozeman	105,175	174,256	185,710	195,246	85.6%	5.1%	285	370	616	398	39.7%	-35.4%
Butte	28,235	36,742	38,754	43,461	53.9%	12.1%	283	688	216	215	-23.9%	-0.7%
Great Falls	143,664	122,376	124,538	121,315	-15.6%	-2.6%	1,138	1,212	933	699	-38.6%	-25.1%
Helena	48,392	56,176	63,002	68,365	41.3%	8.5%	214	638	619	598	178.9%	-3.4%
Kalispell	59,565	89,490	114,031	121,341	103.7%	6.4%	180	534	577	471	162.4%	-18.4%
Missoula	136,825	165,154	175,027	175,647	28.4%	0.4%	836	1,354	1,377	1,480	76.9%	7.5%
<b>TOTAL</b>	<b>854,431</b>	<b>948,049</b>	<b>1,032,208</b>	<b>1,047,398</b>	<b>22.6%</b>	<b>1.5%</b>	<b>9,147</b>	<b>17,101</b>	<b>14,587</b>	<b>14,840</b>	<b>62.2%</b>	<b>1.7%</b>

## Essential Air Service Airports

Airport	Enplanements				Percent Change	Percent Change	Air Freight (tons)				Percent Change	Percent Change
	1986	1993	1995	1996	1986-1996	1995-1996	1986	1993	1995	1996	1986-1996	1995-1996
Glasgow	2,555	4,096	4,104	3,515	37.6%	-14.4%	15	6	6	6	-40.0%	0.0%
Glendive	1,532	1,837	1,732	1,430	-6.7%	-17.4%	8	3	2	2	-73.7%	0.0%
Great Falls			3,989	9,131	N/A	128.9%			6	9	N/A	50.0%
Havre	1,912	2,640	2,886	2,549	33.3%	-11.7%	12	16	15	4	-75.0%	-80.0%
Lewistown	540	2,195	2,413	1,897	251.3%	-21.4%	7	2	3	2	-72.6%	-33.3%
Miles City	1,667	1,873	1,853	1,655	-0.7%	-10.7%	15	5	6	6	-73.3%	33.3%
Sidney	7,662	4,109	4,676	3,465	-54.8%	-25.9%	37	2	4	3	-89.1%	0.0%
Wolf Point	1,808	3,512	3,327	2,940	62.6%	-11.6%	0	2	2	2	400.0%	0.0%
<b>TOTAL</b>	<b>17,676</b>	<b>20,262</b>	<b>24,980</b>	<b>26,582</b>	<b>50.4%</b>	<b>6.4%</b>	<b>94</b>	<b>43</b>	<b>44</b>	<b>35</b>	<b>-62.7%</b>	<b>-20.5%</b>

Source: Montana Airport Authorities and Managers, April, 1997.  
Refer to Exhibit IV-24 and Exhibit IV-25 in Original TranPlan 21





# Passenger Transportation Discussion Enplanements and Air Freight Trends

---



Enplanement counts, a measure of revenue-passenger air traffic, describe trends in the demand for passenger services. Tons of air-freight describe trends in the demand for air freight service at airports with scheduled commercial air service. The growth in passenger enplanements and air freight shipments at Montana's Commercial and Essential Air Service Airports is shown in Exhibit 28.

In common with the rest of the nation, air transportation demand has grown much faster than population in Montana. Passenger enplanements have increased at Montana's seven primary commercial airports by more than 22% in the past decade, which is an average annual increase of 2.3%. The majority of this increase occurred in Butte, Bozeman, and Kalispell.

At Montana's Commercial Service Airports, air freight has grown at an even higher rate than passenger enplanements. The volume of inbound and outbound air freight has increased 62.2% in the past decade. This increase reflects the increasing volume of high-value freight shipped by air nationally. In general, inbound shipments exceed outbound shipments by weight. The largest increases were experienced in Billings, Helena, and Kalispell.

Montana's Essential Air Service enplanements has increased 50.4% between 1986 and 1996. On the other hand, air freight in Essential Air Service airports has seen a steady decrease since 1986.





# Passenger Transportation Exhibit 29 Operations at High Volume General Aviation Airports

Airport	1991	Most Current Year		Percent Change 1991 to most current year
		Year	Operations	
Kalispell City	32,700	1996	35,000	7.0%
Sidney	24,500	1995	23,150	-5.5%
Glasgow*	21,981	1995	23,000	4.6%
Hamilton	16,800	1996	20,000	19.0%
Lewistown	14,650	1994	17,500	19.5%
Plentywood	11,260	1995	11,260	0.0%
Libby	11,000	1995	12,000	9.1%
Ennis	10,390	1996	11,000	5.9%
Miles City	10,388	1996	10,938	5.3%
Stevensville	7,650	1996	10,200	33.3%
Laurel	8,300	1996	13,000	56.6%
Dillon	9,520	1996	10,300	8.2%
Three Forks	9,280	1995	10,000	7.8%
Chinook	8,400	1995	8,550	1.8%
Forsyth	8,312	1996	8,712	4.8%
Havre	10,949	1996	8,988	-17.9%
Gardiner	8,100	1996	8,600	6.2%
<b>Total</b>	<b>224,180</b>		<b>242,198</b>	<b>7.4%</b>

\* Base = 1992

Source: Aeronautics Division - Operation listed from 5010 Inspections done every three years or when changes are made at the airport. Refer to Exhibit IV-26 in Original TranPlan 21



# Passenger Transportation Discussion

## Operations at High Volume General Aviation Airports



In Exhibit 29 the number of annual operations at high volume (over 8,000 ) general aviation airports in 1991 is compared to the most current inspection year. Increased volumes at these airports indicates the importance of intermodal connections.

Operations at high volume general aviation airports have increased 7.4% in the past four years. The highest increases were at Laurel, Stevensville, and Lewistown and Hamilton. Havre and Sidney are the only General Aviation Airports to show a decrease in operations.





# Passenger Transportation Exhibit 30 Montana's Amtrak Ridership Statistics

Station	1987	1990	1994	1995	1996	Percent Change 1995-1996	Percent Change 1987-1996
Browning	2,102	1,312	900	1,296	1,019	-21.4%	-51.5%
Belton	4,167	3,778	3,262	2,749	2,720	-1.1%	-34.7%
Cut Bank	3,281	2,573	2,278	2,012	1,729	-14.1%	-47.3%
Essex	1,457	2,525	2,331	2,596	1,931	-25.6%	32.5%
Glasgow	6,589	6,314	4,763	4,116	3,744	-9.0%	-43.2%
Glacier Park	8,155	10,285	11,099	11,021	10,541	-4.4%	29.3%
Havre	17,223	17,674	14,769	12,818	10,495	-18.1%	-39.1%
Libby	4,706	3,661	4,235	3,937	3,604	-8.5%	-23.4%
Malta	3,374	3,476	3,342	2,702	2,384	-11.8%	-29.3%
Shelby	12,200	14,012	14,886	13,249	11,270	-14.9%	-7.6%
Whitefish	45,534	48,527	69,470	54,538	42,533	-22.0%	-6.6%
WolfPoint	11,588	8,952	8,461	6,552	5,885	-10.2%	-49.2%
STATE TOTALS	120,376	123,089	139,796	117,586	97,855	-16.8%	-18.7%

\* Based on Calendar Year  
Source: Amtrak Monthly Ridership Tapes  
Refer to Exhibit IV-39 in Original TranPlan 21



# Passenger Transportation Discussion

## Passenger Rail In Montana

---



Passenger rail service in Montana is provided by the National Railroad Passenger Corporation (Amtrak) across the northern portion of the state. The "Empire Builder" originates in Chicago and parallels U.S. 2 through Montana with sections that terminate in both Seattle, WA & Portland, OR. There are 12 stops in Montana. On February 1, 1995 Amtrak service to Montana stations was reduced from daily to four days a week. Daily service was resumed on May 11, 1997.

There are Amtrak stations at Browning, Belton-West Glacier, Cut Bank, Essex, Glasgow, Glacier Park (East Glacier), Havre, Libby, Malta, Shelby, Whitefish, and Wolf Point. There are no agents at 6 of the 12 stations, Browning and Glacier Park are seasonal stations, and Essex is a flag stop. The Belton-West Glacier station is owned by the National Park Service, the Whitefish station is owned by Stumptown Historical Society of Whitefish, and the other stations are owned by Burlington Northern Santa Fe Railway.

In the seven years from 1987 to 1993, Amtrak ridership in Montana increased by almost 16%. Measured in terms of total boardings and deboardings this represents an increase of 19,000 riders. This is an annual average increase of 2.7%. In the past two years ridership has decreased by 30%. This is mainly due to the temporary service reduction in 1995.

Amtrak is a federally-funded quasi-public corporation, chartered in the District of Columbia, which has provided intercity passenger service across Montana since it was created by Congress in 1970 when the Rail Passenger Service Act was passed. Actual service by Amtrak began on May 1, 1971. Future service levels in Montana will be affected by national policy decisions concerning Amtrak funding, and the organizational and business decisions made by Amtrak for serving the east-west interstate passenger travel market.





# ***Annual Report***

System Characteristics Overview

## *Bike and Pedestrian Transportation*





## Bike and Pedestrian Transportation

### Exhibit 31 - Bicycle and Pedestrian Daily Journey-to-Work in Selected Montana Cities (April 1990)

---

City	Bicycle		Walked	
	Number	Percent *	Number	Percent
Missoula	793	3.9%	1,638	8.2%
Bozeman	453	4.1%	1,858	16.9%
Great Falls	199	0.8%	1,173	4.8%
Helena	178	1.5%	1,276	10.5%
Billings	172	0.4%	1,779	4.6%
Kalispell	94	1.9%	381	7.5%
Butte	37	0.3%	866	6.4%
Total	1,926	1.5%	8,971	7.2%
Statewide Total	3,209	0.9%	27,022	7.7%

\* Percent of total journey-to-work trips in city.



Source: 1990 Census, U.S. Department of Commerce, Bureau of the Census  
Refer to Exhibit B in Original TranPlan 21

---



# Bike and Pedestrian Transportation Discussion

## Bicycle and Pedestrian Modes in Montana

---



### Bicycles as a Mode Choice In Montana

There is little information on the demand for and the use of bicycles in Montana for anything other than journey-to-work trips. The primary source of data from which to draw conclusions about bicycle ridership is the journey-to-work data collected for the 1990 Census. This data as summarized in Exhibit 31 indicates:

- Just under 1% of all journey-to-work trips were by bicycle.
- Overall bicycle use for journey-to-work trips is low in urban areas and especially low in Great Falls, Billings, and Butte.
- Missoula and Bozeman have the greatest concentration of bicycle use.
- The rate of bicycle work trips in Montana is twice the national average.

### Walking as a Mode of Travel in Montana

Walking is an element in almost every trip. Just under 8% of Montanans walk to work every day, which is almost twice the national average. The median journey time for people walking or cycling to work in 1990 was just under eight minutes. Journey-to-work is the only systematic data available concerning walking. However, it does not include the use of pedestrian facilities by those under 16 and walking for errands and other activities. One reason for the importance of pedestrian trips in Montana is that the state's urban areas are relatively old and have a fairly high population density. Walking is also a traditional form of transportation in small towns across Montana.

(MDT is sponsoring a Personal Transportation Survey that will provide additional information on Bicycle and Pedestrian Modes.)





# ***Annual Report***

System Characteristics Overview

## *Fiscal Year 1997* *Funding*







# Fiscal Year 1997 Funding

## Exhibit 32

### Transportation Fund Obligation

	Program Funding	Federal Share	State Share	Federal Percentage	State Percentage
<b>Federal</b>					
Primary <sup>1</sup>	\$40,356,350	\$36,995,602	\$3,360,748	86.58%	13.42%
Secondary	\$20,420,275	\$17,679,874	\$2,740,401	86.58%	13.42%
Urban	\$2,567,000	\$2,222,509	\$344,491	86.58%	13.42%
Transportation Enhancements <sup>1</sup>	\$350,000	\$303,030	\$46,970	86.58%	13.42%
Annual Programs <sup>1</sup>	\$1,423,532	\$1,232,494	\$191,038	86.58%	13.42%
National Highway System <sup>1</sup>	\$41,815,112	\$36,632,966	\$5,182,146	86.58%	13.42%
Interstate Maintenance, Demonstration, Innovative <sup>1</sup>	\$34,780,200	\$31,732,662	\$3,047,538	91.24%	8.76%
Congestion Mitigation and Air Quality <sup>3</sup>	\$9,168,153	\$7,937,787	\$1,230,366	86.58%	13.42%
Bridge Program <sup>1</sup>	\$11,597,360	\$9,336,088	\$2,261,272	80.00%	20.00%
Safety and Hazard Elimination <sup>1</sup>	\$3,502,225	\$3,143,287	\$358,938	90.00%	10.00%
Federal Lands Highway	\$29,283,100	\$29,283,100	\$0	100.0%	0.00%
Community Transportation Enhancement Program <sup>1 3</sup>	\$4,133,168	\$3,578,497	\$554,671	86.58%	13.42%
General Aviation Projects	\$3,170,900	\$2,853,810	\$317,090	90.0%	10.00%
Railroad Rehabilitation <sup>3</sup>	\$0	\$0	\$0	70.0%	30.00%
Federal Transit Administration <sup>2 3</sup>	\$2,494,677	\$1,657,427	\$837,250	66.4%	33.56%
Statewide Planning & Research	\$6,326,705	\$5,120,374	\$1,206,331	80.0%	20.00%
<b>FEDERAL TOTAL</b>	<b>\$211,388,757</b>	<b>\$189,709,507</b>	<b>\$21,679,250</b>		
<b>State</b>					
Reconstruction Trust Fund	\$35,243,395	\$0	\$24,678,987	0.0%	100.00%
Maintenance	\$64,862,933	\$0		0.0%	100.00%
<b>STATE TOTAL</b>	<b>\$100,106,328</b>	<b>\$0</b>	<b>\$24,678,987</b>		
<b>GRAND TOTAL</b>	<b>\$311,495,085</b>	<b>\$189,709,507</b>	<b>\$46,358,237</b>		

<sup>1</sup> Indian Reservation Funded at 100% Federal

<sup>2</sup> FTA Only Funds 50% of Net Operating Costs in Urban Areas (Match percent is a weighted average)

<sup>3</sup> Includes Local and Private Match

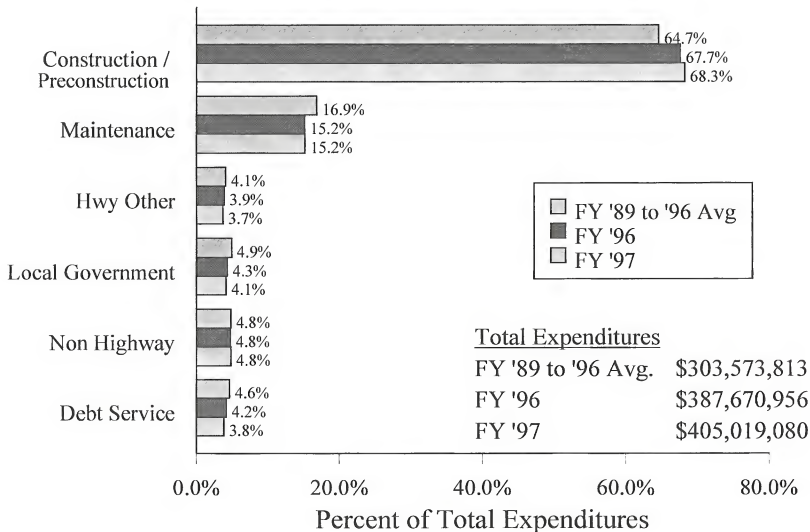
Source: MDT 1997-1999 STIP  
Refer to Exhibit V-4 & V-5 in Original TranPlan 21



# Fiscal Year 1997 Funding

## Exhibit 33

### Highway Program Expenditures



Source: 1997 FYE projection based on April estimates  
 Refer to Exhibit V-8 in Original TranPlan 21

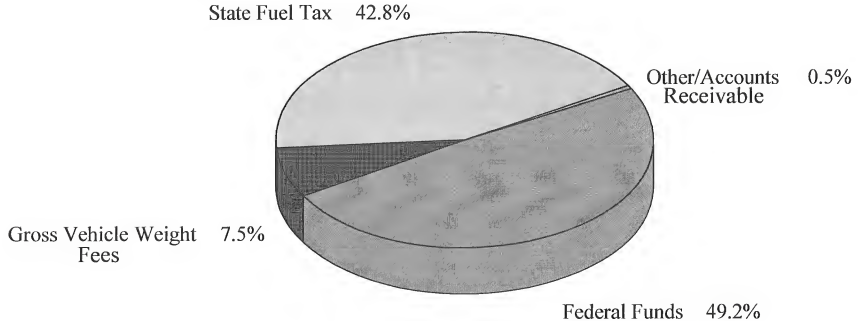




# Fiscal Year 1997 Funding Exhibit 34 Projected 1996 Highway Program Revenues

---

## Revenue Source



Projected 1997 Revenues \$398,934,747

Source: 1997 FYE projection based on April estimates  
Refer to Exhibit V-6 in Original TranPlan 21



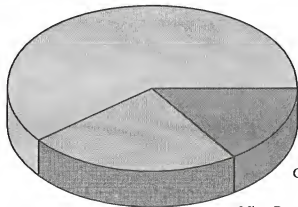
# Fiscal Year 1997 Funding

## Exhibit 35

### Projected 1997 State Fuel Tax/GVW Revenues and Uses



Gasoline Tax \$121,953,888



Diesel Tax \$47,932,458

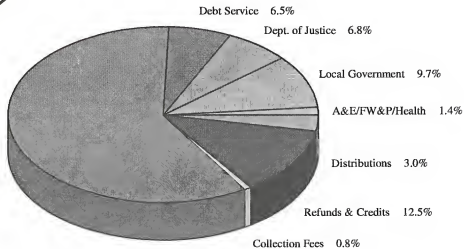
GVW Revenue \$30,845,853

Misc. Revenue \$175,804

#### Gross Revenues

#### Uses

Balance to MDT 59.4%



Source: MDT Financial Management Bureau 7/97





## Fiscal Year 1997 Funding Discussion

---



Although funding levels for 1997 are approximately the same as previous years, several factors could have a major impact on future funding. Most important are congressional efforts to balance the Federal budget within the next five years. Total Federal program reductions for this period are estimated to be about 20%. How much of this reduction will be from the transportation program is yet to be determined.

Congressional debates leading to the next federal transportation authorization bill are also in progress, these reauthorization discussions include efforts by "donor" states to return all federal fuel taxes to states in the form of block grants. This could have a devastating impact on "donee" states such as Montana that receives approximately \$2.50 back for every \$1.00 in Federal fuel taxes collected in Montana. How the next Federal Program will effect Montana should be known later this year.

Any efforts to make up for decreased federal funding with increased state fuel taxes would be undesirable given Montana's low population and current high state fuel taxes. State level diversions of fuel taxes from highway construction and maintenance continues. Efforts to expand these diversions could present problems to future funding stability.





*Annual Report*

---

---

**POLICY GOALS**

**AND**

**ACTIONS STATUS**

---

---



# Montana Department of Transportation Policy Goals and Actions Status

## Summary

The following table reports the implementation status of TranPlan 21 policy goals and actions. The table was developed through a cooperative process involving MDT Administrative staff.

As the TranPlan 21 goals and actions are implemented, this table will serve as both a guide to the offices responsible for implementing the actions and as an instrument of future reporting and evaluation. Priorities are defined below.

PRIORITIES:       HIGH - Ongoing/Implement before December 31, 1997  
                      MEDIUM - Implement 2-5 Years  
                      LOW - Implement when resources allow

The table also includes a column that provides a summary of the work that's been done on each action based on reports from the responsible offices.

Note: The action descriptions in the table are summaries. Please refer to TranPlan 21 for the complete text of the goals and actions.

# Montana Department of Transportation

## Policy Goals and Actions Status As of June, 1997



### Economic Development

A <b>Goal:</b> Promote a Transportation System That Provides Cost Effective Access for Montana's Export Oriented ("basic") Industries to Regional, National, and International Markets.						
Action		Responsible Office(s)	Responsible Person	Priority	Phase <sup>1</sup>	Strategy
A.1	Work with shippers and private providers on a continuing basis to identify barriers to be overcome and transportation improvements that will enhance access to regional, national, and international markets.	Planning	Bill Cloud John Craig- Special Studies	Medium	2 - 3	<ol style="list-style-type: none"> <li>1. Intermodal Management System output projected 3/98.</li> <li>2. Commodity Flow Feasibility Study, projected completion 10/97.</li> <li>3. Surveying shippers as part of biennial TranPlan 21 process.</li> </ol>
A.2	Prioritize support for "basic" industries as a criteria in programming and project selection.	Planning	John Craig- Special Studies Jeff Ebert	High	1	Researching based on other states approach.
A.3	Work with commercial air carriers to maintain and enhance existing levels of service.	Aeronautics	Mike Ferguson	High	5	<ol style="list-style-type: none"> <li>1. Aeronautics Division continues to staff the Governor's Essential Air Service Task Force which provides input to Big Sky Airlines. Was involved in recent legislation passed which increases funding for program nationwide.</li> <li>2. Involvement in frequency and scheduling of Big Sky Airlines for the betterment of the community.</li> <li>3. Continued participation in the Helena Chamber of Commerce Air Service Task Force.</li> </ol>

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

<sup>1</sup> **Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process Policy Goals and Action Status Page GA 2

## ***Economic Development (cont.)***

<b>B Goal: Ensure State and Local Economic Development Policies, Plans, and Priorities Are Factored into Transportation Planning and Programming.</b>						
<b>Action</b>		<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
B.1	Hold annual meetings with Department of Commerce regional development officers to discuss and review long-range plans, identify local and regional industries, infrastructure concerns, and transportation impediments (if any).	Planning* Engineering District Offices	John Craig- Special Studies	High	1 - 2	Staffing Resources didn't allow for meetings in 1996. However, MDT participated in development of Rural Development Strategic Plan and other development efforts.
B.2	Factor state and local economic development program priorities into the programming process.	Planning	John Craig-Urban/ Special Studies Jeff Ebert	High	1	Researching based on other states approach
B.3	Establish a new city park rest area program to encourage visitors to contribute to economic development.	Planning* Engineering District Offices Maintenance	John Craig- Special Studies	High	2 - 3	Implementing City Park Rest Area Program, 8 new rest areas have been located and are under development.

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

<sup>1</sup> **Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process **Policy Goals and Action Status Page GA 3**

## ***Economic Development (cont.)***

<b>C    Goal:    Engage in Multi-state and Regional Initiatives That Facilitate International Trade.</b>						
<b>Action</b>		<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
C.1	Participate in an examination of multi-state trade corridor initiatives.	Planning* MCS	Sandy Straehl	High	5	<p>Actively involved in examination of Camino Real, CANAMEX, WTTN Proposals. Partner with WYDOT on study of Billings/Buffalo corridor.</p> <ol style="list-style-type: none"> <li>1. Participation in the Land Transportation Standards Subcommittee (LTSS) in Working Group 2 (Vehicle Weights and Dimensions). Membership in the LTSS includes Canada, U.S. (Federal) and Mexico. Only five states, including Montana are participants.</li> <li>2. Participation in the Coutts/Sweetgrass Automated Border Crossing Project.</li> <li>3. Participation in development of the Canamex Agreement.</li> </ol>
C.2	Coordinate with planning undertaken by Canadian Provincial Governments of Alberta and Saskatchewan.	Planning* MCS	Sandy Straehl	High	5	<ol style="list-style-type: none"> <li>1. Participation in the Coutts/Sweetgrass Automated Border Crossing Project.</li> <li>2. Reviewing truck permitting and licensing, etc. reciprocity agreements with Saskatchewan.</li> </ol>

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

<sup>1</sup> **Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process    Policy Goals and Action Status Page GA 4



## Economic Development (cont.)

D		Goal: Promote Tourism and Access to Recreational, Historical, Cultural, and Scenic Destinations Through Transportation Planning and Programming.				
Action		Responsible Office(s)	Responsible Person	Priority	Phase <sup>1</sup>	Strategy
D.1	Implement the recommendations of the scenic byway feasibility study.	Planning	John Craig-Special Studies	Medium	1	Was presented to legislature and rejected.
D.2	Prioritize and encourage the development of transportation enhancements that promote tourist access.	Planning	Ed Hedlund	High	5	Through CTEP, local agencies are encouraged to: 1. Develop Bike/Ped improvements that provide access to recreational opportunities, historic sights, scenic and other destinations. 2. Acquire scenic or historic sites. 3. Develop Projects in compliance with ADA requirements. CTEP planner advises local agencies regarding public involvement to ensure each step involves the community input.
D.3	Encourage more tourist oriented directional signing.	Engineering* District Offices Maintenance	Rich Munger	High	5	Working to expand the eligibility of participating businesses.
D.4	Minimize negative impacts of billboards by implementing recommendations from the Governor's Outdoor Advertising Task Force.	Engineering* Legal	Rich Munger	High	4 - 5	Done through legislation and administrative rules.
D.5	Maintaining community character that enhances tourism and local economic development will be considered as part of project evaluation.	Planning* Engineering District Offices	Jeff Ebert	High	1	Researching based on other states approach

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

**<sup>1</sup> Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process Policy Goals and Action Status Page GA 5



## Freight Mobility

<b>A</b> <b>Goal:</b> <b>Ensure Efficient Highway Freight Mobility.</b>						
<b>Action</b>		<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
A.1	Monitor highway freight corridors and prioritize improvements in these corridors.	Planning* MCS	Bill Cloud John Craig- Special Studies	Medium	1 - 2	Awaiting Management Systems (refer to Economic Development A.1)
A.2	Identify and address impediments to efficient freight movements in highway freight corridors.	Planning* MCS	Bill Cloud John Craig- Special Studies	Medium	1 - 2	Awaiting Management Systems - Commodity Flow Feasibility Study Coutts/Sweetgrass project
A.3	Ensure freight corridors are addressed in metropolitan planning organization and other jurisdictional transportation plans.	Planning* District Offices	John Craig- Urban DO's	High	2	Ongoing Planning Process - Awaiting Management Systems to provide data to local governments.
A.4	Work with local, federal and Canadian governments to ensure Montana's border crossing needs are met.	MCS* Planning Engineering	Dave Galt	Medium	5	<ol style="list-style-type: none"> <li>1. Participation in the Coutts/Sweetgrass Automated Border Crossing Project.</li> <li>2. Participation in the operation of the Montana/Alberta Joint Uniform Vehicle Inspection Station located in Coutts, Alberta, Canada.</li> <li>3. Participation in the operation of the Idaho/Montana Joint Port/Weigh Station located at Haugan.</li> <li>4. Participation with Wyoming in establishing a joint port/weigh station in Wyoming.</li> </ol>

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

<sup>1</sup> **Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process    Policy Goals and Action Status Page GA 6

## Freight Mobility (cont.)

<b>B    Goal:    Ensure a Balanced Freight System Through Preservation of the Existing Rail and Air Transportation System.</b>						
<b>Action</b>		<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
B.1	Prevent the further loss of rail branch lines by working with the railroad industry to facilitate the preservation of branch lines.	Planning	John Craig-Special Studies	Medium	1 - 2	Analysis underway for potential track improvement project on Whitetail line.
B.2	Identify and address priority grade separation needs at busy railroad crossings.	Planning* Engineering District Offices	Jeff Ebert	High	5	This is an on-going process as project nominations arise.
B.3	Retain existing right-of-way in rail corridors.	Planning* Engineering	John Craig-Special Studies	Low	1	Monitoring - no railroad abandonments since the 1980's. State Law requires preservation of state owned R/W. No funding for purchases.
B.4	Work with airport operators to maintain, preserve and improve levels of commercial air freight service.	Aeronautics* Planning	Mike Ferguson	Medium	5	The department financially sponsors many airport improvement projects throughout the state. These disbursements of grants and loans are used to help improve airport facilities.

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

**<sup>1</sup> Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process    Policy Goals and Action Status Page GA 7

## Freight Mobility (cont.)

C Goal: Improve Intermodal Connectivity by Increasing the Use of Intermodal Freight Facilities.						
Action	Responsible Office(s)	Responsible Person	Priority	Phase <sup>1</sup>	Strategy	
C.1	Encourage the use of, and improve the performance of, existing intermodal terminals with open access to enable efficient transfers between modes.	Planning* MCS	John Craig - Special Studies	Medium	5	<ol style="list-style-type: none"> <li>1. Routine contact with Intermodal terminal operators</li> <li>2. An agreement was signed by Montana and Alberta which allows motor carriers from any jurisdiction to operate at the weights allowed in the Canadian provinces to transport commodities between the Montana/Alberta border at Sweetgrass and the transloading facility in Shelby, Montana.</li> <li>3. Sponsoring analysis of NETA facility for potential improvement project.</li> </ol>
C.2	Encourage the use of existing truck/rail reload facilities and work with private industry in the development of new facilities with open access.	Planning	John Craig - Special Studies	Medium	5	Awaiting Management Systems for further development
C.3	Involve shippers and private sector providers on a periodic basis to improve the MDT's understanding of freight needs.	Planning	John Craig - Special Studies Bill Cloud	High	5	<ol style="list-style-type: none"> <li>1. Will be surveyed as part of TP 21 Biennial analysis and IMS.</li> <li>2. Regular meetings with rail companies.</li> </ol>
C.4	Include freight access as a component of statewide airport system planning.	Aeronautics* Planning	Mike Ferguson	Low	1 - 2	The Montana airport system plan is updated annually. It is anticipated that funding for a freight access component to this system plan will take place in FY99 or FY00.
C.5	Ensure that the MDT has in-house modal expertise to address freight issues associated with Interstate Commerce Commission requirements.	Planning* Legal	John Craig- Special Studies	High	5	MDT is being assisted by consulting firms with on-going issues such as McCarty Farms.

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

**<sup>1</sup> Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process **Policy Goals and Action Status Page GA 8**



## ***Roadway System Performance***

<b>A    Goal:    Establish Explicit Priorities for Roadway Improvements.</b>						
<b>Action</b>		<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
A.1	Establish a process for ensuring project selection reflects policy and planning goals.	Planning* Engineering District Offices Maintenance	Jeff Ebert	High	1	1. Researching based on other states approach. 2. Working with Management System Developers to integrate management system output into a project selection procedures.

<b>B    Goal:    Systematically Modernize Montana's Highway Infrastructure.</b>						
<b>Action</b>		<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
B.1	Continue to use the existing Geometric Design Standards for preserving and developing the highway system.	Engineering* District Offices Planning	Carl Peil	High	5	On-Going - Continuing use the existing Geometric Design Standards utilizing the flexibility contained therein.
B.2	Establish criteria (goals and standards) to be used to determine reconstruction needs and whether to add capacity.	Planning* Engineering District Offices Maintenance	Bill Cloud	Medium	1 - 2	Awaiting Congestion Management Systems output expected 12/97.
B.3	Establish and implement proactive right-of-way preservation in corridors forecast to have capacity constraints over the next twenty years.	Planning* Engineering District Offices	John Craig- Special Studies Urban	Medium	5	Engaged in several efforts along US 93 to preserve RW.
B.4	Inform local planning and development officials of the state's desire to preserve these corridors and the extent of local responsibilities in this regard.	Planning* Engineering District Offices	John Craig- Special Studies Urban	High	5	Discussions through Urban planning processes.

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

**<sup>1</sup> Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process    Policy Goals and Action Status Page GA 9

## Roadway System Performance (Cont.)

<b>B Goal: Systematically Modernize Montana's Highway Infrastructure.</b>						
	<b>Action</b>	<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
B.5	Encourage local jurisdictions to address right-of-way preservation in local land use plans and any access management programs.	Planning	John Craig- Special Studies Urban	High	5	Working with local jurisdictions in access management project and urban planning process.
B.6	Establish and fund a program, if necessary, for acquisition of right-of-way on highways that are currently congested and TranPlan 21 forecasts indicate will be congested in the next twenty years.	Engineering* Planning District Offices	Tom Martin	Low	5	Corridor preservation is encouraged within identified congested areas. Funding must be prioritized and established when available.
B.7	Use the Pavement, Maintenance, and Bridge Management Systems to coordinate maintenance work with other construction work.	Engineering* Maintenance District Offices	Jim Walther	High	5	Systems coordination is progressing successfully.

<b>C Goal: Enhance the Multimodal Role of the Roadway System.</b>						
	<b>Action</b>	<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
C.1	Include consideration of public transit needs in updates to the Geometric Design Standards.	Engineering* Planning District Offices	Carl Peil	High	5	1. Public transit needs identified in scoping. Projects are being considered on an individual project basis. 2. Geometric Design Standards haven't been updated - Will be considered next update
C.2	Use the Congestion Management System to identify corridors where public transportation could reduce the need for capacity improvements.	Planning* Engineering District Offices	Missoula - Urban	High	2 - 3	Missoula Plan has been completed. Waiting for congestion management system.

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

<sup>1</sup> **Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process Policy Goals and Action Status Page GA 10

## Roadway System Performance (Cont.)

C <b>Goal:</b> Enhance the Multimodal Role of the Roadway System.						
Action		Responsible Office(s)	Responsible Person	Priority	Phase <sup>1</sup>	Strategy
C.3	Identify criteria and locations for transit supportive design.	Planning* Engineering District Offices	John Craig Transit Urban	High	5	<ol style="list-style-type: none"> <li>1. Ongoing plan development - TDP's - As TDM &amp; TDP elements to Transportation Plans and updates for urban areas.</li> <li>2. references in design reviews of Major facility siting</li> <li>3. Heightened awareness from Public Involvement at project level.</li> <li>4. MDT is currently funding transportation development plans in Lewistown and Butte.</li> </ol>

D <b>Goal:</b> Identify and Deploy Cost-effective Intelligent Transportation Systems Applications to Improve Safety and Capacity.						
Action		Responsible Office(s)	Responsible Person	Priority	Phase <sup>1</sup>	Strategy
D.1	Develop the MDT's intelligent transportation system plan as the basis for evaluating, and where cost effective, deploying advanced vehicle technologies in lieu of highway system improvements to improve safety and capacity.	Planning* MCS Engineering District Offices Maintenance	Bill Cloud	High	2	ITS Feasibility Study completed May 1996- determined feasible, going forward with plan. Currently forming ITS Plan Scoping and Steering Committees. Contract underway
D.2	Encourage the metropolitan planning organization areas to include consideration of intelligent transportation systems in their long range plans.	Planning	John Craig Urban	Medium	1 - 2	Awaiting ITS Development - Continuing involvement in ITS conferences and discussions.

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

<sup>1</sup> **Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process **Policy Goals and Action Status Page GA 11**

## Roadway System Performance (cont.)

E Goal: Preserve Highway Pavement Conditions at Existing or Higher Levels on the Interstate and Primary System. Establish Goals for Improving Secondary System Pavement Conditions.						
Action		Responsible Office(s)	Responsible Person	Priority	Phase <sup>1</sup>	Strategy
E.1	Ensure that the Pavement Management System is used as a planning, program development, and engineering tool.	Engineering* District Offices Planning Maintenance	Jim Walther	High	2	The tool is in place. The procedures to implement are being developed and utilized as they progress.
E.2	Ensure use of the Pavement Management System is institutionalized.	Engineering* District Offices Planning Maintenance	Jim Walther	High	2	Through teamwork this is happening.
E.3	Develop ways to evaluate techniques and materials through the management system to ensure long-term performance.	Engineering	Dick Clark	Medium	1 - 2	Exploring software to evaluate current data from PVMS to achieve this goal.
E.4	Use the Pavement Management System to define strategies and funding levels that will maintain existing performance	Engineering* Planning Maintenance	Jim Walther	High	1 - 2	System is in place. Parameters need to be defined.
E.5	Monitor and determine the impacts of the North American Free Trade Agreement upon Montana's transportation facilities.	Engineering* Planning MCS	Dick Clark	Medium	5	Working towards achieving more reliable truck data to assess impacts. 1. Participation in LTSS (see item 1 in C. 1, above). 2. Participation in the WASHTO Committee on Highway Transport. 3. Participation in the AASHTO Subcommittee on Highway Transport.
E.6	Regularly update the cost allocation study to ensure equity in user fees and include analysis of secondary system use.	MCS* Planning	Dave Galt	High	1 - 2	1. MCS transferred personal services budget to fund two temporary FTE to assist Transportation Planning in gathering data for the cost allocation study.
E.8	Use the Pavement Management System to assist local jurisdictions to understand their preservation needs.	Engineering	Dick Clark	High	2 - 3	Policy is in place. Pilot program with one volunteer county web site available

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

**<sup>1</sup> Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process Policy Goals and Action Status Page GA 12



## Roadway System Performance (cont.)

E <b>Goal:</b> Preserve Highway Pavement Conditions at Existing or Higher Levels on the Interstate and Primary System. Establish Goals for Improving Secondary System Pavement Conditions.						
Action		Responsible Office(s)	Responsible Person	Priority	Phase <sup>1</sup>	Strategy
E.9	Establish maintenance standards and goals to complement the Geometric Design Standards.	Maintenance* Engineering	John Blacker	Medium	1 - 2	Maintenance has been working closely with the Pavement Management group to establish a consistent process for determining roadway maintenance criteria. When the PMS system is fully implemented with sufficient data, the maintenance standards will be written and goals established.
E.10	Prioritize system preservation and maintenance.	Engineering* District Offices Maintenance Planning	Dick Clark	High	3 - 4	Systems have been prioritized with reports distributed to appropriate jurisdictions.
E.11	Use the Bridge Management System as a planning, program development, and engineering tool.	Engineering* Planning	Mike Murphy	High	1 - 2	The tools are in place with training and evaluation proceeding. Anticipate 2 years to accumulate data.
E.12	Provide and disseminate transportation system preservation and maintenance information.	Engineering* Maintenance Public Affairs Planning	Gary Gilmore	High	2 - 3	<ol style="list-style-type: none"> <li>1. Data collection and evaluation in progress - will be disseminating accomplishments.</li> <li>2. Department has initiated "Transportation Awareness Program"</li> </ol>

Priorities: HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

Responsible Office: \* Indicates Lead Office

<sup>1</sup> Phase Levels: 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process     Policy Goals and Action Status Page GA 13

## Roadway System Performance (Cont.)

F <b>Goal:</b> Improve Construction and Maintenance Techniques and Materials.						
Action		Responsible Office(s)	Responsible Person	Priority	Phase <sup>1</sup>	Strategy
F.1	Continually review maintenance operational procedures for efficiency and effectiveness improvements.	Maintenance* District Offices	John Blacker	Medium	5	<ol style="list-style-type: none"> <li>1. The Division continually is reviewing department methods and procedures for roadway maintenance.</li> <li>2. Have provided guidance and best practices information to the field and have improved quality of pavement work.</li> <li>3. Produced a working manual on chip seals.</li> <li>4. Continually reviews other states best practices and the testing and evaluation of new materials and processes to ensure best practices and applications.</li> </ol>
F.2	Review procedures for testing and accepting maintenance materials to ensure quality materials.	Engineering* Maintenance	Ken Nuemiller	High	5	Working closely (MTC and MAT) to ensure quality in maintenance projects.
F.3	Utilize the Maintenance Review Section and the Construction Review Section, through the Materials Bureau, to further review the problem of poor aggregates and availability throughout the state.	Engineering* Maintenance	Ken Nuemiller	High	5	Continuing to work on this as part of the annual program.
F.4	Review department procedures for testing and accepting new material and procedures developed through research and development.	Engineering* Maintenance	Ken Nuemiller	High	4 - 5	Participant in NTPPEP for evaluating new materials. Formalized research implementation procedures for products and procedures.
F.5	Continue ongoing communications processes with contractors and materials suppliers to improve result.	Engineering* Maintenance District Offices	Bob Tholt	High	5	Continue to meet regularly as MCA/MDT technical liaison as well as specialty seminars with industry.

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

<sup>1</sup> Phase Levels: 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process Policy Goals and Action Status Page GA 14

## Roadway System Performance (Cont.)

F <b>Goal:      Improve Construction and Maintenance Techniques and Materials.</b>						
Action		Responsible Office(s)	Responsible Person	Priority	Phase <sup>1</sup>	Strategy
F.6	Continue efforts to review bidding procedures to determine if there are any impediments to implementation of new methods or materials.	Engineering	Bob Tholt	High	5	Continue to explore methods within state and federal rules and regulations.
F.7	Establish a task force including contractors and suppliers to review the bidding process.	Engineering	Bob Tholt	High	2 - 3	Several changes to the bidding process and bidding procedures have been implemented.

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

**<sup>1</sup> Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process      Policy Goals and Action Status Page GA 15



## Access Management

<b>A</b> <b>Goal:</b> Improve Corridor Level Access Management to Preserve the Highway System.						
Action		Responsible Office(s)	Responsible Person	Priority	Phase <sup>1</sup>	Strategy
A.1	Establish a classification scheme for access management that defines the appropriate level of access and access control for different classes of state roadway according to functional classification, existing level of access, and surrounding land use.	Planning* Engineering District Offices Maintenance	John Craig Special Studies	High	1 - 2	Consultant Contract Underway
A.2	Inventory, refine the methods, and ensure that there is adequate authority to manage access in Montana.	Planning* Engineering District Offices	John Craig Special Studies	High	1 - 2	Refer to A.1
A.3	Work to communicate the performance benefits arising from an access management policy.	Planning* Engineering District Offices	John Craig Special Studies	High	5	Refer to A.1

<b>B</b> <b>Goal:</b> Establish and Fund a Level of Travel Demand Forecasting That Will Support an Access Management Program.						
Action		Responsible Office(s)	Responsible Person	Priority	Phase <sup>1</sup>	Strategy
B.1	Use the state travel Highway Information System, the TranPlan 21 travel forecasting method, and the Congestion Management System to anticipate areas and facilities in need of access management actions.	Planning	Bill Cloud John Craig Special Studies	High	1 - 2	Working on development of CMS - output projected in 1997. Will continue using HIS for foreseeable future.
B.2	Encourage improvement of the condition of travel demand forecasting at the Metropolitan Planning Organization level to better anticipate and identify problem areas, and to link access management policies to local land use policies.	Planning	John Craig Special Studies Urban	High	1 - 2	Refer to B.1 Modeling update efforts continue based on socioeconomic (land use) data. Exploring alternative trip linking processes as alternative modeling.

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

**<sup>1</sup> Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process    Policy Goals and Action Status Page GA 16



## Land Use Planning and Transportation

<b>Goal: Encourage Responsible Jurisdictions to Establish Land Use Planning and Development Permitting Mechanisms to Manage Transportation Demand by Building Their Planning Capacity.</b>						
<b>Action</b>		<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
A.1	Work with local jurisdictions to establish and implement a consistent approach for including land use and access management strategies in urban area and Metropolitan Planning Organization plans receiving state funding	Planning	John Craig Urban	High	5	Ongoing via plan updates
A.2	Work with the Metropolitan Planning Organizations and urban areas to develop consistent land use driven travel demand forecasting capability.	Planning	John Craig Urban	High	5	Helena and Butte updates complete. Ongoing update process
A.3	Participate in a working group of the Department of Commerce and representatives of affected jurisdictions to develop and propose legislative recommendations for the 55th Legislature.	Planning		High	1	MDOC is looking at statewide process.
A.4	Consistently apply existing development review authority to ensure that new development contributes to the cost of resulting transportation system improvements.	Planning* Engineering District Offices	Sandy Straehl	High	2 - 3	Although each development is unique, review through the system impact action process is being consistently applied to approximately 15 projects.
A.5	Encourage the Department of Administration, the Long Range Building Committee, and state agencies to consider transportation demands when locating new capital facilities and leasing new property.	Planning* Maintenance	John Craig Urban	High	4	Directory developed and distributed to agencies

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

**<sup>1</sup> Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process Policy Goals and Action Status Page GA 17

## Land Use Planning and Transportation (Cont.)

<b>B    <u>Goal:</u>    As Part of the Development Review Process, Provide Authority to Enable Local Jurisdictions and MDT to Require Developer Contributions to Improvements That Accommodate New Traffic Demands.</b>						
<b>Action</b>		<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
B.1	Establish a defensible mechanism for determining the costs of transportation improvements to be paid by the developer.	Planning* Engineering District Offices Legal	Sandy Straehl	High	1 - 2	Criteria and thresholds are being identified as to when developments should be reviewed in the system impact action process in order to pass cost onto the developer.

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

<sup>1</sup> **Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process    Policy Goals and Action Status Page GA 18



## Public Transportation in Montana

<b>A Goal: Promote and Support Increased Use of Public Transportation Systems.</b>						
<b>Action</b>		<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
A.1	Support local promotional / educational programs to publicize transportation opportunities.	Planning* Public Affairs	John Craig Transit	High	4 - 5	Brochure and video complete MTA effort, training classes, TAWSE, MR TMA display booth.
A.2	Ensure highway improvements address public transportation needs.	Planning* Engineering District Offices Maintenance	Jeff Ebert	High	5	On-Going Process. Public transportation needs are addressed on a project by project basis as required.
A.3	Provide state-level funding support for transit by providing a fixed amount of funding for rural transit systems "off the top" of Surface Transportation Program funds, and transfer urban highway funds to transit at the request of metropolitan planning organizations.	Planning	Dave Jensen	High	4 - 5	Funds provided to Section 5311 providers "off-the-top" last three years.
A.4	Coordinate state planning, urban area, and transit system development planning and management.	Planning	John Craig Transit	High	5	1. Transit advisory committees 2. MR TMA in place 3. State agency reps on capital assistance committee. 4. Presentations at TAC etc.
A.5	Establish minimum transit service goals in cooperation with local agencies.	Planning	John Craig Transit/Urban	Medium	4 - 5	Ongoing - On site visit annually, daily phone contacts. PTMS completed.

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

**<sup>1</sup> Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process **Policy Goals and Action Status Page GA 19**

## ***Public Transportation in Montana (Cont.)***

<b>B Goal: Preserve Existing Intercity Public Transportation Service and Encourage / Facilitate the Development of New Services.</b>						
<b>Action</b>		<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
B.1	Work with the intercity bus industry to identify the most effective state-level actions for preserving existing service.	Planning	John Craig Transit	High	4 - 5	Complete - Intercity & Rural Passenger Transportation Study.
B.2	Evaluate the costs and feasibility of funding new intercity service in unserved areas.	Planning	John Craig Transit	High	4	Complete - Refer to B.1
B.3	Fund the implementation of a "rural ridesharing" demonstration program.	Planning	John Craig Transit	High	4 - 5	Kalispell Ride Share Program complete. Missoula and Helena studies underway.
B.4	Work to improve publicly owned intermodal passenger facilities.	Planning	John Craig Transit	High	2	PTS - worked to improve efforts at W. Yellowstone Greyhound station in project.
B.5	Coordinate with Amtrak to facilitate increased use of rail and preservation of existing service levels.	Planning	John Craig Spec Studies	High	5	Worked with Save AMTRAK organization in attempt to preserve service - continue to monitor. Developed brochure.
B.6	Evaluate intermodal passenger connections using existing bus, train or airline terminals.	Planning	John Craig Transit	Medium	5	IRPTS study completed Boardings monitored and reported.
B.7	Ensure that Montanan's interest in expanded passenger rail services are addressed in any national decision making concerning increased Amtrak service.	Planning	John Craig Spec Studies	High	5	MDT continues to monitor AMTRAK activities and participated in efforts to restore 7 day service.

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

**<sup>1</sup> Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process **Policy Goals and Action Status Page GA 20**



## Public Transportation in Montana (Cont.)

<b>C</b> <b>Goal:</b> <b>Work to Improve Service to Social Service Passengers and the Transportation Disadvantaged - the Elderly, Children at Risk, Low Income, and the Disabled - Through Interagency Coordination.</b>						
	<b>Action</b>	<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
C.1	Improve state agencies and local provider cooperation in funding coordination.	Planning	John Craig Transit	High	4 - 5	State Level - \$ from DPPHS for capital assistance - led regional coordination study - Management reviews.
C.2	Establish a statewide coordination council to increase flexibility in budgets and budgeting processes so that transportation providers can more easily access and coordinate available funds.	Planning	John Craig Transit	High	1 - 2	In Development
C.3	Work with Public Service Commission to facilitate easier entry into passenger service provision (especially Medicaid transportation).	Planning	John Craig Transit	Medium	5	Ongoing

<b>D</b> <b>Goal:</b> <b>Identify and Implement Transportation Demand Management Actions That Will Work in Montana.</b>						
	<b>Action</b>	<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
D.1	Encourage Metropolitan Planning Organizations and urban areas to evaluate demand-side strategies in their plans.	Planning	John Craig Urban	High	5	Ongoing - Billings and Missoula - Evaluate Helena, Bozeman, and Butte TDP plans.
D.2	Work with other state agencies to develop a transportation demand management program for state government.	Planning* Public Affairs	John Craig Transit	High	5	Try Another Way Committee for (Helena) State Employees - (TAWSE) - vanpool CTEP - Bike Coordinator

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

**<sup>1</sup> Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process      Policy Goals and Action Status Page GA 21



## Bicycle and Pedestrian Transportation

A <b>Goal:</b> Institutionalize Bicycle and Pedestrian Modes.						
	Action	Responsible Office(s)	Responsible Person	Priority	Phase <sup>1</sup>	Strategy
A.1	Develop the State Bicycle and Pedestrian program with the following elements: <ul style="list-style-type: none"> <li>• A coordinator with responsibilities for planning and assisting with implementation. This will include coordination with related state and local government planning efforts.</li> <li>• A program of training and assistance to staff within the Department to address the needs of non-motorized modes.</li> <li>• Coordination with related state planning efforts including State Department of Fish, Wildlife and Parks, State Lands, and Department of Natural Resources and Conservation.</li> <li>• Develop a statewide bicycle/pedestrian plan that will implement the related goals and objectives of TranPlan 21.</li> </ul>	Planning	Ed Hedlund	High	4 - 5	Full time bike/ped coordinator hired. Coordinator will advise local agencies on the development and implementation of a non-motorized facility plan.
			Ed Hedlund	Medium	1 - 2	NHI Course scheduled October 21-23, 1997
			Ed Hedlund	High	1 - 2	Efforts underway to identify contact persons from each agencies. Will then determine if and where working together would be beneficial.
			Ed Hedlund	High	1	Bike/ped coordinator reviewing TranPlan 21, and other state's bike/ped plans. Once review is complete the development of the statewide bike/ped plan will begin.
A.2	Work with the Department of Commerce to prepare a bicycle-related tourist guide.	Planning* Public Affairs	Ed Hedlund	High	1 - 2	MDT submitted proposal to DOC and it was accepted. Project is in early stages of development.
A.3	Assist other units of government to provide transportation facilities that encourage or consider the use by bicyclists and pedestrians.	Planning	Ed Hedlund	High	5	NHI Course scheduled October 21-23, 1997 - Assistance is also available to provide planning guidance when requested

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

**<sup>1</sup> Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process    Policy Goals and Action Status Page GA 22

## **Bicycle and Pedestrian Transportation (Cont.)**

A <b>Goal:</b> Institutionalize Bicycle and Pedestrian Modes.						
<b>Action</b>		<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
A.4	Prepare and disseminate public service announcements addressing bicycle and pedestrian safety.	Planning* Public Affairs	Ed Hedlund	High	5	Working with Public Affairs regarding "Share the Roadway", and "Be safe be seen" Campaigns and the development of new public service announcements and materials.
A.5	Encourage the Safety Management System steering committee to use the Safety Management System to provide information on bicycle and pedestrian safety.	Planning	Ed Hedlund	High	5	Requested that Pierre Jomini ask the SMS to provide information on bicycle and pedestrian safety.
A.6	Encourage the Safety Management System steering committee to undertake efforts to educate motorists on safely interacting with bicyclists and pedestrians.	Planning	Ed Hedlund	High	5	Requested that Pierre Jomini ask the SMS to educate motorists on safely interacting with bicyclists and pedestrians.

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

**<sup>1</sup> Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process      **Policy Goals and Action Status Page GA 23**

## ***Bicycle and Pedestrian Transportation (Cont.)***

<b>B      <u>Goal:</u>      Target Bicycle-related and Pedestrian Improvements to Account for Urban, Rural and Regional Differences in Current and Future Use.</b>						
<b>Action</b>		<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
B.1	Identify the most significant routes designated through Metropolitan Planning Organization and urban area plans and selected rural "touring routes" with the greatest demand or potential demand as the basis for planning and system improvement decisions.	Planning* Engineering District Offices	Ed Hedlund	High	1 - 2	Gathering Data. Reviewing MPO and urban plans to identify planned bike/ped improvements that may impact state routes. In the process of identifying "touring routes". Looking into data collection technology that may assist in identifying and quantifying bike/ped usage and needs. Distributing surveys to bicyclists which request this information.
B.2	Establish a consistent planning approach and design guidelines for incorporating bicycle and pedestrian facilities into highway improvement projects.	Planning* Engineering Maintenance	Ed Hedlund	High	5	MDT Road Design Manual defines pedestrian facilities design and Bikeway design. A periodic review of planning and design criteria will be performed to identify areas needing updates.
B.3	In incorporated areas, unincorporated communities, and Indian reservations consider further bicycle improvements based upon proven use or expected future use.	Planning* Engineering District Offices	Ed Hedlund	High	5	Current and future bicyclist needs will be identified by the local agency of jurisdiction and identified improvements would be funded in part with CTEP funds.
B.4	Improve bicycle and pedestrian facilities in Montana through incorporation in existing projects.	Planning* Engineering District Offices	Ed Hedlund	High	5	Currently more than 50% of CTEP projects are directly related to bike/ped improvements and regularly programmed highway projects including accommodations at rest areas, shoulder widening and sidewalks, etc.
B.5	Make selected bicycle improvements in urban areas as a congestion management and air quality improvement strategy.	Planning* Engineering District Offices	John Craig Urban	High	4 - 5	Missoula bike coordinator, bike racks on buses, bike trails.

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

**<sup>1</sup> Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process    **Policy Goals and Action Status Page GA 24**

## **Bicycle and Pedestrian Transportation (Cont.)**

<b>B</b>		<b>Goal: Target Bicycle-related and Pedestrian Improvements to Account for Urban, Rural and Regional Differences in Current and Future Use.</b>				
<b>Action</b>		<b>Responsible Office(s)</b>	<b>Responsible Person</b>	<b>Priority</b>	<b>Phase<sup>1</sup></b>	<b>Strategy</b>
B.6	Adopt and implement consistent bicycle friendly maintenance standards.	Maintenance* Engineering Planning	John Blacker	High	4 - 5	MDT has improved maintenance of paths and walkways, improved sweeping operations to remove particulate from the roadway to improve air quality and reduce the hazards to bicycle & pedestrian traffic. 29 new sweepers since 1994.

**Priorities:** HIGH - Ongoing/Implement before December 31, 1997; MEDIUM - Implement 2-5 Years; LOW - Implement when resources allow

**Responsible Office:** \* Indicates Lead Office

**<sup>1</sup> Phase Levels:** 1 = Research; 2 = Development; 3 = Implementation; 4 = Completed; 5 = On-Going Process **Policy Goals and Action Status Page GA 25**







Montana Department of Transportation  
Transportation Planning Division  
2701 Prospect Avenue  
P.O. Box 201001  
Helena, MT 59620-1001  
Phone (406)444-3423. TDD (406)444-7696

350 copies of this publication were produced at an estimated cost of \$1.24 per copy for a total of \$433.17 which is the cost of printing. Alternative accessible formats of this publication will be provided upon request.